HOSPITAL PROGRESS

VOL. XXIII JANUARY, 1942 No. 1

Catholic Schools of Nursing Approved by the Council on Nursing Education and Accredited by the Catholic Hospital Association

The first list of Catholic Schools of Nursing approved by the Council on Nursing Education for the United States and accredited by the Catholic Hospital Association of the United States and Canada, through its Executive Board, is herewith presented. In the processes by which the list was assembled it was the function of the Council on Nursing Education to approve the Catholic schools' educational program; it was the function of the Executive Board of the Association to pass judgment upon the hospital's interests in the school and the functioning of school and hospital together as a unified and integrated whole. Special consideration was given by both the Council and the Executive Board to those schools of nursing which are known not to be integral parts of Catholic hospitals.

The 360 Catholic Schools of Nursing in the United States constitute 27.4 per cent of the total number of all Schools of Nursing, which number 1,311. Of the 360 Catholic Schools of Nursing, 217 or 60 per cent have thus far invited the Sister Examiners of the Catholic Hospital Association for a visit of study and inspection. All but a small number of these schools were surveyed and evaluated and as a result, 177 of the Catholic Schools of Nursing are now ready to receive the Association's approval and endorsement. The evaluation of the remaining schools is still under consideration.

The 177 Catholic Schools of Nursing reported as approved in the present list are located in 154 cities and towns, in 37 states. They are located furthermore in 75 of the archdioceses and dioceses and are conducted by 78 different Sisterhoods and one Brotherhood. These statistics are here presented to call attention to the wide distribution of the approved Catholic Schools of Nursing as well as to indicate the widely distributed administrative responsibilities for these schools as shown by the large number of the religious orders and congregations of nursing Sisters. There is, therefore, at least one approved Catholic School of Nursing in each of 37 of the 45 states in which these Catholic professional schools are located. To state this from another point of view, there is at least one Catholic School of Nursing in each of 75 of the total number of 112 archdioceses and dioceses. Finally 79 of the total number of 129 Catholic Sisterhoods conduct at least one approved Catholic School of Nursing. The 177 schools which are here listed as approved were educating at the end of the year 1940, a total of 15,044 student nurses, 55 per cent of the total number of student nurses receiving their professional education under the auspices of the Catholic nursing religious.

Attention should be called to the fact that this is the first list of approved Catholic Schools of Nursing. From time to time as the Evaluation Program of the Catholic Hospital Association progresses, additional lists will be published. Thus far the invitations which have been received by the Council on Nursing Education have come in response to the first announcement early in 1938 of the beginning of the Association's Evaluation Program. It should be noted that the judgment expressed by the inclusion of a particular school is based upon data assembled in some instances as long as two years ago.

I. Brief Review of the Evaluation Program

Those who have followed the development of the Catholic Hospital Association's Evaluation Program of its schools of nursing will recall that the publication of a list of approved schools was not the primary purpose of the Program. It was intended rather to effect a stimulation of the Catholic schools to ambition and achieve progressively higher levels of excellence in an extensive effort in professional education. To achieve this purpose, procedures and techniques were devised, borrowed in part from accrediting agencies but modified always to meet the purposes of the particular group of schools which the Program was developed to serve. The decision ultimately to publish a list of the approved Catholic schools of nursing dates back almost eleven years to the Catholic Hospital Association Convention at St. Paul, where the assembled

Sisters reached the conclusion that at some future time the Association should achieve the function of an accrediting agency. The present list, therefore, must be regarded as the culmination of eleven years of continuous endeavor.

Pursuant of the decision reached at St. Paul, the Association undertook first of all the task of formulating in a preliminary way a set of professional and tentative criteria for judging the excellence of a school. These criteria were adopted as working standards and on the basis of them each one of 84 diverse Sisterhools undertook a self-examination of its own schools of nursing. The data thus accumulated served the two-fold purpose of revealing the extent of the validity of the tentative criteria, but what was much more important, they led to the recognition of the importance of the individuality of each of the Catholic Schools of Nursing.

Factual data became available in vast abundance to show not only the variability of the schools, depending upon geographic position, physical facilities, financial resources, and personnel, but also variability in the spirit of the schools depending upon the particular character of the Sisterhoods conducting the institutions, the emphasis upon the Catholicity of the school, and the prominence of the religious element in the educational process. Coincident with all of this, ample evidence was accumulated concerning the influence of levels of medical practice in the various localities in which the schools were located and, as a necessary consequence, concerning the interdependence of relative excellence in medical care and relative excellence in the school's educational program as basic in the preparation for the profession of nursing.

The self-examination of the schools thus led in turn to a better understanding of the methods by which the evaluation of schools of nursing should be made, and led the association further away from a standardizing objective. As a first step, the Council on Nursing Education, which had been previously established, selected a group of seven Sisters who were ultimately to be appointed visitors to the Catholic schools. The Council and the seven Sisters together developed through a month's period of intensive cooperative study at St. Louis University, the various procedures for the evaluation of the schools and drew up the various documents which were to safeguard the continuity and uniformity in the Evaluation Program. In this way criteria were defined, a Manual of School Evaluation was developed, methods of scoring a school of nursing, the Evaluation and Statistical Pattern Maps, schedules for securing objective data about a school, and finally forms for the calculation of percentile ratings were devised. It was determined that not only objective studies of the factual data concerning a school were to be considered, but also judgments concerning a large number of criteria in reaching a final judgment concerning a particular school.

The visits to schools were begun on March 19, 1938, and continued at intervals from that time to the present. Changes in the personnel of the Council on Nursing Education and of the Committee of Examiners became necessary from time to time, but the continuity of service has remained undisturbed. With the progress of the work, final reports have been issued not to all of the schools as yet, but to a sufficient number of them to secure a fairly widespread understanding of the Association's procedures.

During all of this time, the development of a list of approved schools requested by the St. Paul Convention of 1931, as well as by several of the subsequent conventions, was still regarded as a matter for future action. But by 1940, however, it became apparent that the publication of a list was regarded as imperative by the Sisters. Resolutions bearing upon this point were adopted by the St. Louis and the Philadelphia Conventions in 1940 and in 1941, and the Council was directed not to await the issuing of final reports to all of the schools thus far visited, but to proceed as rapidly as circumstances would permit with the publication of the list. Other occurrences in various fields of professional education also seemed to point to the desirability and even the need of a list of approved schools, so that the Association has now finally yielded to these pressures and presents by way of a progress report, its first list of accredited schools.

II. Techniques and Viewpoints in Evaluation

While it is true, as already stated, that some schools of nursing have thus far not received a complete report from the Catholic Hospital Association, it cannot be concluded from this that the judgments upon which the approval rests are based upon inadequate information. The data which the Council on Nursing Education had at its disposal for each of the schools were derived from the following documents:

a) the schedules filled out by the institutions themselves and checked by the Council against available public documents as well as by the Sister Examiner during her visit;

b) the score cards as filled out by the Sister Examiner during or shortly after her visit to the school;

c) the Evaluation Pattern Map, which in addition to the grading of the Sister Examiner fixed the school's position with reference to other Catholic schools on a percentile rating basis for 63 criteria; and thus permitted a comparative judgment;

d) the Statistical Pattern Map, which again fixes through a percentile rank order each school's position with reference to 95 statistical elements concerning each school, again permitting a comparative judgment;

e) the report written by the Sister Examiner for the Council.

It must be emphasized that in arriving at a judgment concerning a school all purely statistical or mechanical procedures were carefully avoided. Each school was evaluated in open discussion in which in executive session, all the members of the Council on Nursing Education and the Committee of Sister Ex-

aminers took part, except when it was necessary for one or the other member of these two groups to be absent. In only very few instances was a decision reached in the absence of the Sister Examiner herself. For the most part, moreover, the Sister Examiner took the position of an advocate of the school when the school which she visited was under discussion.

The procedure which was followed through consistently was briefly the following:

The general facts about a school were recited and, as occasion demanded, amplified and discussed; both the Statistical and the Evaluation Pattern Maps were reviewed; the Sister Examiner's report was read; and then by formal vote subsequent to a discussion, a school was declared approved or otherwise. In a few instances supplementary information was required and in these cases the judgment concerning the school was deferred for a future meeting of the Council. In reaching these decisions, it must be emphasized again and again that the Council on Nursing Education and the Committee of Examiners were deeply impressed by the necessity of treating each school as an individual unit. Judgments based on standardized patterns of organization or administration were carefully avoided. Each school's particular objective and its effective adherence to its purpose rather than any particular framework or mode of operation formed the basis of judgment, all this in accordance with the principles laid down for the Council at the time when the Catholic Hospital Association inaugurated its Program. It was realized that this procedure demanded an openness of mind to permit departure from many of the accepted viewpoints in professional and particularly in nursing education. Nevertheless, it was thought that it was more important to judge a school by its effectiveness in the pursuit of an acceptable and valid purpose than by a stabilized set of standards.

The Small School

Obviously, also, the procedure in school evaluation here being described led to extensive differences of opinion and even controversy in the judgment about an individual school. Thus, for example, it became important at the outset to adopt the formulation of a broad and comprehensive policy with reference to the small school of nursing. The data accumulated by the Catholic Hospital Association in its present effort seemed to point most conclusively to the increasing difficulties in conducting an effective educational program in a school, the smaller its student body and the smaller in bed capacity and daily census of the hospital to which the school is attached. Nevertheless, when the small school is viewed comprehensively with reference not only to the hospital, but also with reference to the community in which it is located, it soon becomes obvious that a school which under one set of circumstances merits approval would under other circumstances merit an equally definite disapproval.

It was recognized, in other words, that to attach any absolute meaning to such terms as "an excellent educational program" would be to fail to recognize that adaptability of the institution which is so strongly emphasized as personal adaptability in the education of the individual nurse. The constantly recurring question whether a school is conscientiously and effectively performing an educational function had to be answered with reference to each school under review.

While it was recognized that the small school is necessarily handicapped in its efforts, it cannot by any means be concluded that its difficulties are directly related in all cases to its size. This is obvious from two viewpoints: first, because many of the larger schools have educational programs which in themselves are scarcely less complex and troublesome than those which the small school must face; and, on the other hand, some of the smaller schools are carrying out their educational activities under all but ideal conditions and are characterized by a high degree of excellence in their achievement.

The Catholic School

Other considerations entered with equal intimacy into the formulation of a judgment about a school. The importance of retaining centers of religious education, and particularly of Catholic education, in certain areas of the country imposes upon certain schools of nursing a heavy responsibility. The need for a Catholic center of education cannot be used as an excuse for conducting an inadequate school of nursing; rather does the need of a center of religious education demand the maintenance of particularly strong professional schools wherever the need for a Catholic school is most keenly felt. Nevertheless, with the plans which the Catholic Hospital Association has now in mind, it is clear that some of the schools in isolated areas are susceptible of a development which will make them still more effective bearers of culture and professional excellence than they have already made themselves.

Today's Needs

In arriving at a judgment, moreover, concerning the inclusion of a school in an approved list, it is obvious, too, that the present-day needs must be considered an influential factor. It was recognized that the exclusion of certain schools from an approved list would deprive certain areas of the country of any opportunity of developing locally a supply of nurses which in particular centers would impose a serious hardship on the community. Here again the danger was recognized by the Council and by the Sister Examiners of having their judgments too strongly influenced first of all by the needs of the present moment and secondly by local needs. On the other hand the mere fear of undue influence of these factors could not be regarded as a deterrent from facing the issue courageously and with conviction.

The School and the Hospital

Another vexing controversial point which is mentioned chiefly because of its wide applicability is the problem of the relation of the school of nursing to the hospital to which it is attached. It is clear that there must be a definite relationship between the excellence

of the school of nursing and the excellence of the hospital of which the school forms an integral part. On the other hand it seems equally true that while in some areas the excellence of the hospital as a center for the care of the sick and for the diffusion of medical care is on a higher level than the excellence of the school as an educational institution, it is equally true that, in progressively more and more instances, the school of nursing through the sincerity and effectiveness of its educational endeavors, under competent leadership, is actually elevating the level of performance of the hospital.

Instances of both processes are not difficult to find. It is rarely, if ever, true that the school acts as a brake on the development of the hospital, but it is true in a large number of instances, that the hospital had retarded the development of the school of nursing as an educational institution. We do not wish to imply in these statements that it would be better to lose sight more and more of the importance of the service-giving function of the school, but we do wish to emphasize the importance of the closest possible relationship between the school and the hospital if the continuing excellence of both is to be promoted.

All of the above and much more which may be written in a similar vein emphasizes the importance in the evaluation procedure of moral, psychological, and social judgments rather than of the purely factual data available concerning a particular school of nursing. It emphasizes, also, however the necessity of determination in dealing with situations in which the factors here reviewed fail in the achievement of a noteworthy educational result. There were instances enough in the Catholic group of schools of nursing in which in the face of overwhelming odds, even though with leadership regarded as sufficiently competent, the judgment had to be faced and reached that a particular school could not be included in the list of approved schools.

III. The Meaning of Approval and Accreditation

It would seem almost platitudinous to say that in a list of approved schools numbering 177, all the included schools cannot possibly be of equal merit and excellence. Even if the Catholic Hospital Association had committed itself to a standardization program, it would not be true that all schools included in any list of standardized schools could be of an equal order of distinction in their educational work. It is clear, therefore, that the meaning to be attached to "approval" is briefly this that in the judgment of the Catholic Hospital Association, the schools here listed are characterized by that measure of sincerity and effectiveness as Catholic schools of nursing which will merit the confidence of students entering upon a serious educational endeavor and which will give the students the assurance that in choosing any of the schools in this list, a worthy education in the profession of nursing can be secured.

The Association, moreover, by "accrediting" these schools wishes to emphasize the thought that students in any of these schools, should they choose to transfer to another school in the same list, can do so with confidence and can be accepted by any of the other schools. This latter statement cannot be taken to mean, to be sure, that a school accepting a student from another school will not supplement the student's previous education, for clearly each school has its individual curriculum and its own schedules and programs which are not standardized in all of the schools in this list. Accreditation, therefore, by the Catholic Hospital Association of the school is intended to convey the Association's judgment that as far as a particular student may have progressed in her education, the studies pursued in any particular school represent sound educational efforts. "Approval" therefore cannot imply a judgment concerning equivalences of school for school for the simple reason that approval is not based upon standardization. As a matter of fact, included in this list are schools whose educational programs range from those of the highest order of merit to those which are susceptible of development through continuing encouragement and stimulation. Over some of the schools in this list, the Association will continue to exercise a measure of educational supervision. To make this possible some will submit special annual reports to the Association with reference to certain phases of their educational program. Some of the schools will be revisited to study those phases of their educational work in which they have been thought to need encouragement.

In other words this list of approved schools must be interpreted in the same way as the lists published by other accrediting agencies are to be interpreted. The principle of compensating excellencies may permit the approval of a school, but it does not necessarily imply that a school is at the limit of its development. To assist schools in such developments in particular areas and phases will now form the particular objective of the Catholic Hospital Association with reference to the schools which it has placed upon its approved list.

IV. Further Steps

All of the above makes it clear that the Catholic Hospital Association in its Evaluation Program has now reached the point at which it must effectively exercise the responsibilities which have grown out of its work thus far. To this end, it was determined at the meeting of the Council, in June, 1941, that a Committee on Institutional Counseling be appointed which will have as its chief responsibility, the continuing supervisory program of the Association.

It was determined that this Committee on Institu-

tional Counseling was to be made up in part of Sisters who had had active experience in school surveying; in part, of Sisters who had served on the Council on Nursing Education, and was to be supplemented by the appointment of a Sister who had thus far had no contacts with the actual work in the Evaluation Program. The appointment of such a Committee was furthermore authorized by the Executive Committee of the Executive Board, and the Committee was placed under the immediate control of the Council on Nursing Education.

The creation of this Committee of Institutional Counselors necessitates certain changes in personnel both in the Council and in the Committee of Examiners. The re-constituted Council and its Committees are composed of the following members:

COUNCIL ON NURSING EDUCATION FOR THE UNITED STATES

Sister M. Henrietta, S.S.M., R.N., M.A.,
Sisters of St. Mary,
Assistant Professor in Nursing Education at St. Louis University School of Nursing,
St. Louis, Missouri.

Mother M. Fidelia, C.C.V.I., R.N., B.S., Inspectress of Hospitals,
Sisters of Charity of the Incarnate Word,
Incarnate Word Convent,
San Antonio, Texas.

Sister M. Agnes, O.S.F., R.N., A.B.,
Franciscan Sisters of the Sacred Heart,
Director of St. Joseph's College of Nursing,
San Francisco, California.

Sister M. Ruth, S.S.J., R.N., B.S., M.S.,
Sisters of St. Joseph,
Superintendent of Wheeling Hospital,
Wheeling, West Virginia.

Committee of Examiners

Sister M. Geraldine, S.S.M., R.N., M.S.,
Sisters of St. Mary,
Executive Dean and Director of St. Louis University School of Nursing,
St. Louis, Missouri.

Sister M. Kevin, R.S.M., R.N., M.A.,
Sisters of Mercy of the Union,
Director of St. Catherine's Hospital School of Nursing of Creighton University,
Omaha, Nebraska.

Sister M. Euphrasia, O.S.F., R.N., B.S.,
Sisters of the Third Order of St. Francis,
Superintendent of St. Agnes Hospital,
Philadelphia, Pennsylvania.

Sister M. Agnes Miriam, S.C.N., R.N., M.S.,
Sisters of Charity of Nazareth,
Educational Director of SS. Mary and Elizabeth Hospital School of Nursing,
Louisville, Kentucky.

Sister M. Berno Flint, O.S.B., R.N., B.S.,
Sisters of St. Benedict,
Instructor at St. Cloud's Hospital School of Nursing,
St. Cloud, Minnesota.

Committee on Institutional Counseling

Sister Helen Jarrell, R.H., R.N., A.M.,
Religious Hospitallers of St. Joseph,
Dean of Loyola University School of Nursing,
Chicago, Illinois.

Sister M. Joseph, R.S.M., R.N., B.S.,
Sisters of Mercy of the Union,
Director of Mercy Hospital School of Nursing,
Baltimore, Maryland.

Sister M. Conchessa, C.S.J., R.N., M.A.,
Sisters of St. Joseph of Carondelet,
Superintendent of St. Mary's Hospital,
Minneapolis, Minnesota.

Sister M. Gratiana, R.N., B.S.,
Sisters of the Sorrowful Mother of the Third Order of St. Francis,
Director of St. John's Hospital School of Nursing,
Tulsa, Oklahoma.

V. Conclusion

In presenting this first list of approved Catholic Schools of Nursing, the Executive Board necessarily feels somewhat reminiscent of the many years during which the Evaluation Program has been in progress. The Board wishes to thank all those who have participated in this undertaking; first and foremost, the School Administrators themselves whose interest and enthusiasm led them to such splendid cooperation with the Council. It wishes also to thank the Sister members of the Council on Nursing Education and the Sister members of the Committee of Examiners, who gave so freely and liberally of their time without any compensation at the sacrifice of days of convenience and with the expenditure of so much of themselves. It wishes to thank also the higher Superiors of the Sister members of the Council and of the Committee of Examiners for permitting these Sisters to engage in these activities. It wishes to thank also Their Excellencies, the Members of the Administrative Committee of the National Catholic Welfare Conference, without whose approval of the Evaluation Program, the work could not have progressed.

The special thanks of the Association are also due to the Committee of Professional Advisers representing welfare, educational, administrative, and public relations' interests, without whose encouragement and approval the Association would scarcely have dared to undertake this work.

The Executive Board takes pride in the fact that the Association was able, through careful economies and planning, to make this large undertaking possible without imposing any additional expense upon any of the institutions that have been served through the Evaluation Program. Furthermore, it is the present intention of the Executive Board to continue to assist the schools through the functioning of the new Committee on Institutional Counseling with no expense whatsoever to the Catholic schools of nursing. The Association may not be able to carry the financial responsibilities without subsidy from the institutions, but surely every effort will be made to perform these services without additional cost to the hospitals.

The Executive Board in publishing this list, dedicates it to Christ, the Teacher and Physician, Who healed the sick and instructed the ignorant and safeguarded the health of body and mind and soul of all those who believed in Him and loved Him in the days of His earthly life. The Association has no fonder wish than that through this work of educational and professional promotion it may have contributed its mite toward making Christlike nurses serve other Christs in a Christlike manner.

LIST OF CATHOLIC SCHOOLS OF NURSING APPROVED BY THE COUNCIL ON NURSING EDUCATION AND ACCREDITED BY THE CATHOLIC HOSPITAL ASSOCIATION OF THE UNITED STATES AND CANADA

Marginal Number	State / City or Town (Archdiocese or Diocese)	Name of School Address	Name of Sisterhood or Brotherhood in Charge	Established Year	No. of Students at time of Visit	Educational Affiliation: Name and Address of College or University	Clinical Facilities: Name and Address of Hospital	Capacity at Time of Visit: Beds	Bassinets	Symbols	Marginal Number
	ALABAMA										
1	**Gadsden** (Mob.)	**Holy Name of Jesus** Moragne Park	Missionary Sisters of the Most Blessed Trinity	1925	45		**Holy Name of Jesus** Moragne Park	96	18	*a*	1
	ARIZONA										
2	**Tucson** (Tuc.)	**St. Mary's** St. Mary's Road	Sisters of St. Joseph of Carondelet	1914	81[24]		**St. Mary's** St. Mary's Road	190	25	*a, c*	2
	ARKANSAS										
3	**Fort Smith** (L.R.)	**St. Edward's Mercy** 1411 Rogers Avenue	Sisters of Mercy of the Union	1906	47		**St. Edward's Mercy** 1411 Rogers Avenue	100	15	*a*	3
4	**Jonesboro** (L.R.)	**St. Bernard's** 224 E. Mathews Avenue	Olivetan Sisters of St. Benedict	1919	22		**St. Bernard's** 224 E. Mathews Avenue	90	10	*a*	4
5	**Little Rock** (L.R.)	**St. Vincent's** 1000 High Street	Sisters of Charity of Nazareth	1906	65		**St. Vincent's** 1000 High Street	195	50	*a, b, d*[3]	5
	CALIFORNIA										
6	**Los Angeles** (L.A.)	**Queen of Angels** 2301 Bellevue Avenue	Franciscan Sisters of the Sacred Heart	1926	106	**Immaculate Heart College** Los Angeles, California	**Queen of Angels** 2301 Bellevue Avenue	325	64	*a, b, f*	6
7	**San Francisco** (S.Fr.)	**St. Joseph's** Buena Vista and Park Hill Avenues	Franciscan Sisters of the Sacred Heart	1921	127[24]	**State Teachers' College** San Francisco, California	**St. Joseph's** Buena Vista and Park Hill Avenues	200	44	*a, c, f*	7
	COLORADO										
8	**Denver** (Den.)	**Mercy**[1] 1630 Fillmore Street	Sisters of Mercy of the Union	1902	108		**Mercy** 1619 Milwaukee Street	210	30	*a, b, f*	8
9		**St. Anthony's** 16th and Quitman Streets	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1919	78	**University of Colorado** Boulder, Colorado	**St. Anthony's** W. 16th Avenue and Quitman Street	180	30	*a, b, f*	9
10		**St. Joseph's**[2] 1818 Humbolt Street	Sisters of Charity of Leavenworth	1900	121		**St. Joseph's** 1818 Humboldt Street	240	54	*a, b, f*	10
	CONNECTICUT										
11	**Waterbury** (Hart.)	**St. Mary's** 56 Franklin Street	Sisters of St. Joseph of Chambery	1909	107		**St. Mary's** 56 Franklin Street	226	44	*a, b, f*	11
	DELAWARE										
12	**Wilmington** (Wil.)	**St. Francis** 8th and Clayton Streets	Sisters of the Third Order of St. Francis	1924	47		**St. Francis** 8th and Clayton Streets	104	31	*a, b, f*	12
	DISTRICT OF COLUMBIA										
13	**Washington** (Bal.)	**Georgetown University Hospital** 35th and N. Streets, N.W.	Sisters of the Third Order of St. Francis	1903	88	**Georgetown University** Washington, D. C.	**Georgetown University Hospital** 35th and N Streets, N.W.	210	51	*a, b, c, d*[2], *f*	13

	GEORGIA										
14	**Atlanta (Sav.)**	**St. Joseph's Infirmary** 272 Courtland Street, N.E.	Sisters of Mercy of the Union	1900	68		**St. Joseph's Infirmary** 272 Courtland Street, N.E.	150	23	*a, b, c, d*[3], *f*	14
15	**Savannah (Sav.)**	**St. Joseph's** 322 E. Taylor Street	Sisters of Mercy of the Union	1902	39	**Benedictine College** Savannah, Georgia	**St. Joseph's** 322 E. Taylor Street	100	15	*a, f*	15
	IDAHO										
16	**Boise (B.)**	**St. Alphonsus** 4th and Washington Streets	Sisters of the Holy Cross	1906	67		**St. Alphonsus** 412 State Street	139	20	*a, f*	16
17	**Nampa (B.)**	**Mercy** 1615 S. 8th Avenue	**Sisters of Mercy of the Union**	1920	41		**Mercy** 1615 S. 8th Avenue	65	15	*a, f*	17
	ILLINOIS										
18	**Bloomington (Peo.)**	**St. Joseph's** 614 S. Morris Avenue	Sisters of the Third Order of St. Francis	1920	62		**St. Joseph's** 824 W. Jackson Street	203	22	*f*	18
19	**Chicago (Chic.)**	**Columbus** 2548 Lakeview Avenue	Missionary Sisters of the Sacred Heart	1907	70		**Columbus** 2548 Lakeview Avenue	152	20	*a, b, d*[4], *f*	19
20		**St. Anne's** 4850 Thomas Street	Poor Handmaids of Jesus Christ	1913	108	**Loyola University School of Nursing** Chicago, Illinois	**St. Anne's** 4950 W. Thomas Street	240	60	*a, b, d*[4]	20
21		**St. Anthony de Padua** 2875 W. 19th Street	Franciscan Sisters of the Sacred Heart	1920	70		**St. Anthony de Padua** 2875 W. 19th Street	214	36	*a, b, f*	21
22		**St. Bernard's**[3] 6344 Harvard Avenue	Religious Hospitallers of St. Joseph	1906	85	**Loyola University School of Nursing** Chicago, Illinois	**St. Bernard's Hotel Dieu** 6337 Harvard Avenue	200	33	*a, b, d*[4]	22
23		**St. Elizabeth's** 1431 N. Claremont Ave.	Poor Handmaids of Jesus Christ	1914	96	**Loyola University School of Nursing** Chicago, Illinois	**St. Elizabeth's** 1431 N. Claremont Ave.	262	40	*a, b*	23
24		**St. Mary of Nazareth** 1120 N. Leavitt Street	Sisters of the Holy Family of Nazareth	1902	96	**De Paul University** Chicago, Illinois	**St. Mary of Nazareth** 1120 N. Leavitt Street	246	38	*a, b, f*	24
25	**East St. Louis (Bel.)**	**St. Mary's** 129 N. 8th Street	Poor Handmaids of Jesus Christ	1921	60		**St. Mary's** 129 N. 8th Street	260	36	*a, b*	25
26	**Evanston-Chicago (Chic.)**	**St. Francis** 355 Ridge Avenue	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1918	99	**Loyola University School of Nursing** Chicago, Illinois	**St. Francis** 355 Ridge Avenue	292	50	*a, b, c*	26
27	**Freeport (Rock.)**	**St. Francis** 1209 S. Walnut Street	Franciscan Sisters of the Sacred Heart	1923	38		**St. Francis** 1209 S. Walnut Street	97	16	*a, f*	27
28	**Jacksonville (Spfd.)**	**Our Saviour's** 446 E. State Street	Sisters of the Holy Cross	1919	45		**Our Saviour's** 446 E. State Street	93	12	*a, f*	28
29	**Kankakee (Chic.)**	**St. Mary's** 192 S. 5th Avenue	Sisters, Servants of the Holy Heart of Mary	1895	57		**St. Mary's** 192 S. 5th Avenue	145	22	*a*	29
30	**Oak Park-Chicago (Chic.)**	**Oak Park** 525 Wisconsin Avenue	Sisters of the Misericorde	1906	70	**Loyola University School of Nursing** Chicago, Illinois	**Oak Park** 525 Wisconsin Avenue	130	40	*a, b, d*[4], *f*	30

d[1] University of Arkansas School of Medicine, Little Rock, Arkansas.
d[2] Georgetown University School of Medicine, Washington, D. C.
d[3] Emory University School of Medicine, Atlanta, Georgia.
d[4] Loyola University School of Medicine, Chicago, Illinois.

SYMBOLS

a American College of Surgeons — Fully Approved
a[1] American College of Surgeons — Provisionally Approved
b American Medical Association — Internship Approved
c American Medical Association — Approved for Residency in a Specialty
d Teaching Hospital Attached to a Medical School
f Hospital Affiliation Secured to Supplement the Curriculum

Marginal Number	State / City or Town (Archdiocese or Diocese)	Name of School Address	Name of Sisterhood or Brotherhood in Charge	Established Year	at Time of Visit No. of Students	Educational Affiliation Name and Address of College or University	Clinical Facilities Name and Address of Hospital	Capacity at Time of Visit Beds	Bassinets	Symbols	Marginal Number
1	**Peoria** (Peo.)	**St. Francis** 616 N. Glen Oak Avenue	Sisters of the Third Order of St. Francis	1915	170		**St. Francis** 616 N. Glen Oak Avenue	350	51	a[1], b, f	1
2	**Springfield** (Spfd.)	**St. John's** 9th and Mason Streets	Hospital Sisters of St. Francis	1886	203	**De Paul University** Chicago, Illinois	**St. John's** 7th and Mason Streets	650	45		2
3	**Waukegan** (Chic.)	**St. Therese's** W. Washington Street	Missionary Sisters, Servants of the Holy Ghost	1929	70	**De Paul University** Chicago, Illinois	**St. Therese's** W. Washington Street	160	26	a, f	3
	INDIANA										
4	**East Chicago** (Ft.W.)	**St. Catherine's** 4321 Fir Street	Poor Handmaids of Jesus Christ	1928	71		**St. Catherine's** 4321 Fir Street	252	60	a, b	4
5	**Fort Wayne** (Ft.W.)	**St. Joseph's** W. Berry and Broadway	Poor Handmaids of Jesus Christ	1918	117		**St. Joseph's** W. Berry and Broadway	248	52	a	5
6	**Gary** (Ft.W.)	**St. Mary's Mercy** 540 Tyler Street	Poor Handmaids of Jesus Christ	1912	79		**St. Mary's Mercy** 540 Tyler Street	215	55	a, b	6
7	**Hammond** (Ft.W.)	**St. Margaret's** 30 Clinton Street	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1919	73		**St. Margaret's** 25 Douglas Street	265	50	a, b	7
8	**Lafayette** (Ft.W.)	**St. Elizabeth's** 14th and Hartford Sts.	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1900	56	**St. Francis Normal College** Lafayette, Indiana	**St. Elizabeth's** 14th and Hartford Streets	225	30	a, c	8
9	**Mishawaka** (Ft.W.)	**St. Joseph's** 214 W. 4th Street	Poor Handmaids of Jesus Christ	1919	53		**St. Joseph's** 215 W. 4th Street	100	20	a, f	9
10	**Terre Haute** (Ind.)	**St. Anthony's** 1021 S. 5th Street	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1919	67	**St. Mary-of-the-Woods College** St. Mary-of-the-Woods, Indiana	**St. Anthony's** 1021 S. 6th Street	171	23	a, b	10
	IOWA										
11	**Burlington** (Dav.)	**Mercy** 610 N. 4th Street	Sisters of the Third Order of St. Francis	1904	31		**Mercy** 610 N. 4th Street	125	26	a	11
12	**Carroll** (S.C.)	**St. Anthony's** S. Clark Street	Franciscan Sisters of the Third Order of Perpetual Adoration	1905	55		**St. Anthony's** S. Clark Street	108	22	a	12
13	**Cedar Rapids** (Dub.)	**Mercy** 835 Sixth Avenue, S.E.	Sisters of Mercy	1900	51	**Mt. Mercy Junior College** Cedar Rapids, Iowa	**Mercy** 835 Sixth Avenue, S.E.	147	26	a, b	13
14	**Council Bluffs** (D.M.)	**Mercy** 420 E. Washington Avenue	Sisters of Mercy of the Union	1896	60	**Creighton University** Omaha, Nebraska	**Mercy** 420 E. Washington Ave.	135	12	a, b, d[18], f	14
15	**Des Moines** (D.M.)	**Mercy** 4th and Ascension Streets	Sisters of Mercy of the Union	1893	78	**Dowling Junior College** Des Moines, Iowa	**Mercy** 5th and Ascension Streets	166	24	a, b	15
16	**Dubuque** (Dub.)	**St. Joseph's Mercy**[4] James and Peabody Streets	Sisters of Mercy of the Union	1900	92	**Loras College** Dubuque, Iowa	**St. Joseph's Mercy** James and Peabody Streets	130	22	a	16
17	**Keokuk** (Dav.)	**St. Joseph's** 118 S. 14th Street	Sisters of the Third Order of St. Francis	1901	31		**St. Joseph's** 14th and Exchange Streets	110	15	a[1]	17

18	Mason City (Dub.)	St. Joseph's Mercy[6] Beaumont Drive	Sisters of Mercy of the Union	1915	50	Trinity College Sioux City, Iowa	St. Joseph's Mercy 180 Beaumont Drive	167	*a*	25	18
19	Ottumwa (Dav.)	St. Joseph's 1600 N. Ash Street	Sisters of the Holy Humility of Mary	1914	35		St. Joseph's 1600 N. Ash Street	78	*a*	12	19
20	Sioux City (S.C.)	St. Vincent's 624 Jones Street	Sisters of St. Benedict	1910	58	Briar Cliff College Sioux City, Iowa	St. Vincent's 624 Jones Street	116	*a*	14	20
	KANSAS										
21	Concordia (Con.)	St. Joseph's 323 E. 5th Street	Sisters of St. Joseph of Concordia	1919	34[24]	Marymount College Salina, Kansas	St. Joseph's 323 E. 5th Street	75	*a*	10	21
22	Dodge City (Wich.)	St. Anthony's 1800 Central Avenue	Sisters of St. Joseph	1922	31		St. Anthony's 1800 Central Avenue	80	*a*	14	22
23	Fort Scott (Wich.)	Mercy 816 Burke Street	Sisters of Mercy of the Union	1915	56	Fort Scott Junior College Fort Scott, Kansas	Mercy 816 Burke Street	110	*a*	12	23
24	Garden City (Wich.)	St. Catherine's 608 N. 5th Street	Sisters of the Third Order of St. Dominic	1928	22		St. Catherine's 608 N. 5th Street	43	*a*	7	24
25	Hutchinson (Wich.)	St. Elizabeth's Mercy 500 W. 20th Street	Sisters of Mercy of the Union	1920	27		St. Elizabeth's Mercy 500 W. 20th Street	60	*a*[1]	12	25
26	Kansas City (Leav.)	Providence 18th and Barnett Streets	Sisters of Charity of Leavenworth	1920	47	St. Mary's College Leavenworth, Kansas	Providence 18th and Barnett Streets	80	*a, b, f*	20	26
27		St. Margaret's 8th and Vermont Streets	Sisters of the Poor of St. Francis	1929	87		St. Margaret's 8th and Vermont Streets	225	*a, b, d*[7]*, f*	26	27
28	Leavenworth (Leav.)	St. John's 7th and Kiowa Streets	Sisters of Charity of Leavenworth	1903	29	St. Mary's College Leavenworth, Kansas	St. John's 7th and Kiowa Streets	65	*a, f*	6	28
29	Manhattan (Con.)	St. Mary's 11th and Osage Streets	Sisters of St. Joseph of Concordia	1936	37		St. Mary's 11th and Osage Streets	50	*f*	11	29
30	Salina (Con.)	St. John's Penn and Ash Streets	Sisters of St. Joseph of Concordia	1921	37	Marymount College Salina, Kansas	St. John's Penn and Ash Streets	55	*a, f*	15	30
31	Topeka (Leav.)	St. Francis W. 6th and Garfield Aves.	Sisters of Charity of Leavenworth	1909	33	St. Mary's College Leavenworth, Kansas	St. Francis W. 6th and Garfield Avenues	95	*a, f*	18	31
32	Wichita (Wich.)	St. Francis Emporia and 9th Streets	Sisters of the Sorrowful Mother	1917	111	Wichita University Wichita, Kansas	St. Francis 928 N. Emporia Avenue	275	*a, b, c*	25	32
	KENTUCKY										
33	Lexington (Cov.)	Nazareth 544 W. Second Street	Sisters of Charity of Nazareth	1918	66	Nazareth College Louisville, Kentucky	St. Joseph's Infirmary 544 W. Second Street	223	*a, b, c*	22	33
34	Louisville (L.)	St. Anthony's Barrett Avenue and St. Anthony Place	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1923	52	Nazareth College Louisville, Kentucky	St. Anthony's Barrett Avenue and St. Anthony Place	138	*a, b, f*	25	34
35		St. Joseph's Infirmary 735 Eastern Parkway	Sisters of Charity of Nazareth	1919	91	Nazareth College Louisville, Kentucky	St. Joseph's Infirmary 735 Eastern Parkway	300	*a, b, c*	25	35

[d4] Loyola University School of Medicine, Chicago, Illinois. [d7] University of Kansas School of Medicine, Lawrence and Kansas City, Kansas. [d12] Creighton University School of Medicine, Omaha, Nebraska.

SYMBOLS

a American College of Surgeons — Fully Approved
a[1] American College of Surgeons — Provisionally Approved
b American Medical Association — Internship Approved
c American Medical Association — Approved for Residency in a Specialty
d Teaching Hospital Attached to a Medical School
f Hospital Affiliation Secured to Supplement the Curriculum

Marginal Number	State / City or Town (Archdiocese or Diocese)	Name of School Address	Name of Sisterhood or Brotherhood in Charge	Year Established	No. of Students at Time of Visit	Educational Affiliation: Name and Address of College or University	Clinical Facilities: Name and Address of Hospital	Capacity at Time of Visit: Beds	Bassinets	Symbols	Marginal Number
1		**SS. Mary & Elizabeth** 1367 S. 12th Street	Sisters of Charity of Nazareth	1915	54	**Nazareth College** Louisville, Kentucky	**SS. Mary & Elizabeth** 1367 S. 12th Street	145	30	*a, b, f*	1
	LOUISIANA										
2	**Baton Rouge** (N.O.)	**Our Lady of the Lake**	Franciscan Sisters of Calais	1923	82		**Our Lady of the Lake Sanitarium**	125	24	*a*	2
3	**New Orleans** (N.O.)	**Mercy Soniat Memorial** 1321 Annunciation St.	Sisters of Mercy of the Union	1925	61		**Mercy Soniat Memorial Hospital** 1321 Annunciation St.	118	24	*a, b*	3
	MAINE										
4	**Lewiston** (Port.)	**St. Mary's General** 318 Sabattus Street	Sisters of Charity — Grey Nuns	1908	48[24]		**St. Mary's General** 318 Sabattus Street	430	12	*a, b, f*	4
	MARYLAND										
5	**Baltimore** (Bal.)	**Bon Secours**[6] 2003 W. Fayette Street	Sisters of Bon Secours	1921	8		**Bon Secours** 2025 W. Fayette Street	150	25	*a, b, c, f*	5
6		**Mercy** Calvert and Saratoga Streets	Sisters of Mercy of the Union	1899	107	**University of Maryland** Baltimore, Maryland	**Mercy** Calvert and Saratoga Streets	290	35	*a, b, c, d*[9]*, f*	6
7		**St. Joseph's** Oliver and Eden Streets	Sisters of the Third Order of St. Francis	1901	81		**St. Joseph's** 1400 N. Caroline Street	245	33	*a, b, c, f*	7
	MICHIGAN										
8	**Ann Arbor** (Det.)	**St. Joseph's**[7] 326 N. Ingalls Street	Sisters of Mercy of the Union	1912	42		**St. Joseph's** 326 N. Ingalls Street	250	30	*a, c, d*[10]	8
9	**Battle Creek** (Lan.)	**Leila Y. Post Montgomery**[8] North Avenue and Emmet Street	Sisters of Mercy of the Union	1927	38		**Leila Y. Post Montgomery** North Avenue and Emmet Street	143	17	*a*[1]*, b*	9
10	**Bay City** (Sag.)	**Mercy**[9] 15th and Howard Streets	Sisters of Mercy of the Union	1902	53	**Aquinas College** Grand Rapids, Mich.	**Mercy** 16th and Franklin Streets	110	30	*a, b*	10
11	**Detroit** (Det.)	**Mercy College of Nursing**[10] 2217 East Grand Blvd.	Sisters of Mercy of the Union	1933	309[11]	**Our Lady of Cincinnati College** Cincinnati, Ohio	**St. Joseph's Mercy**[12] 2200 East Grand Blvd.	185	30	*a, b*	11
12	**Grand Rapids** (G.R.)	**Mercy Central School of Nursing**[13] 220 Cherry St., S.E.	Sisters of Mercy of the Union	1935	151[14]	**Aquinas College** Grand Rapids, Mich.	**St. Mary's**[15] 250 Cherry Street, S.E.	220	35	*a, b, c*	12
13	**Hancock** (Mar.)	**St. Joseph's** Water Street	Sisters of St. Joseph of Carondelet	1920	34		**St. Joseph's** Water Street	75	16	*a, f*	13
14	**Jackson** (Lan.)	**Mercy** 526 Lansing Avenue	Sisters of Mercy of the Union	1915	41		**Mercy** 524 Lansing Avenue	150	25	*a, b, f*	14
15	**Kalamazoo** (Lan.)	**St. Camillus** 1521 Gull Road	Sisters of St. Joseph	1895	99	**Nazareth College** Nazareth, Michigan	**Borgess** 1521 Gull Road	214	27	*a*[1]	15
16	**Muskegon** (G.R.)	**Mercy**[16] 1521 Jefferson Street	Sisters of Mercy of the Union	1904	62	**Aquinas College** Grand Rapids, Mich.	**Mercy** 1521 Jefferson Street	100	25	*a, c*	16

17	Pontiac (Det.)	St. Joseph's[17] 900 Woodward Avenue	Sisters of Mercy of the Union	1927	50		St. Joseph's 900 Woodward Avenue	175 *a, c*	30	17
	MINNESOTA									
18	Breckenridge (St.Cl.)	St. Francis 5th St. and S. Oregon Avenue	Franciscan Sisters of the Immaculate Conception	1908	37		St. Francis 415 W. Oregon Avenue	58 *a, f*	12	18
19	Minneapolis (St.P.)	St. Mary's 2500 S. 6th Street	Sisters of St. Joseph of Carondelet	1901	181	College of St. Catherine St. Paul, Minnesota	St. Mary's 2500 S. 6th Street	260 *a, b, f*	40	19
20	St. Cloud (St.Cl.)	St. Cloud's 7th Avenue and 15th St.	Sisters of St. Benedict	1908	65		St. Cloud's 1406 Sixth Avenue, N.	235 *a*	30	20
21	St. Paul (St.P.)	St. Joseph's 436 Main Avenue	Sisters of St. Joseph of Carondelet	1894	167	College of St. Catherine St. Paul, Minnesota	St. Joseph's 69 N. Exchange	249 *a, b, f*	32	21
	MISSOURI									
22	Boonville (K.C.)	St. Joseph's E. Morgan Street	Sisters of St. Benedict	1920	21		St. Joseph's E. Morgan Street	75 a^1, *f*	14	22
23	Joplin (K.C.)	St. John's 2203 Connor Avenue	Sisters of Mercy of the Union	1903	43	Kansas State Teachers' College Pittsburg, Kansas	St. John's 2203 Connor Avenue	100 a^1, *f*	10	23
24	Kansas City (K.C.)	St. Joseph's Linwood and Prospect Streets	Sisters of St. Joseph of Carondelet	1900	105	St. Teresa's Junior College Kansas City, Missouri	St. Joseph's Linwood and Prospect Streets	240 *a, b, c, f*	41	24
25		St. Mary's 2840 Baltimore Avenue	Sisters of St. Mary	1916	64	Rockhurst College Kansas City, Missouri	St. Mary's 2800 Main Street	156 *a, b, c, f*	22	25
26	St. Louis (St.L.)	Alexian Brothers' 3933 South Broadway	Alexian Brothers	1928	41[18]	St. Louis University St. Louis, Missouri	Alexian Brothers' 3933 South Broadway	175 *a*, d^{12}	—	26
27		St. John's 307 S. Euclid Avenue	Sisters of Mercy of the Union	1905	112	St. Louis University St. Louis, Missouri	St. John's 307 S. Euclid Avenue	301 *a, b*, d^{12}	47	27
28		St. Louis University School of Nursing 1402 S. Grand Blvd.	Sisters of St. Mary	1928	258[19]	[20]	St. Mary's Group of Hospitals of St. Louis University[21]	673 *a, b, c*, d^{12}	58	28
29		St. Mary's Infirmary 1536 Papin Street	Sisters of St. Mary	1933	62[22]	St. Louis University St. Louis, Missouri	St. Mary's Infirmary 1536 Papin Street	146 *a, b*, d^{12}	14	29
	MONTANA									
30	Billings (G.F.)	St. Vincent's 12th Ave. and N. 30th St.	Sisters of Charity of Leavenworth	1913	64		St. Vincent's 12th Ave. and N. 30th St.	150 *a*	22	30
31	Butte (Hel.)	St. James Idaho and Silver Streets	Sisters of Charity of Leavenworth	1906	57	Carroll College Helena, Montana	St. James Idaho and Silver Streets	147 *a, b*	33	31
32	Great Falls (G.F.)	Columbus 1601 Second Avenue, N.	Sisters of Charity of Providence	1894	93	College of Great Falls Great Falls, Mont.	Columbus 1601 Second Avenue, N.	225 a^1	50	32
33	Havre (G.F.)	Sacred Heart 9th Avenue and 4th Street	Sisters of St. Francis of Penance and Christian Charity	1921	38	Northern Montana College Havre, Montana	Sacred Heart 900 — 4th Street	100 *a*	13	33

d^{9} University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Maryland.
d^{10} University of Michigan School of Medicine, Ann Arbor, Michigan.
d^{12} St. Louis University School of Medicine, St. Louis, Missouri.

SYMBOLS

a American College of Surgeons — Fully Approved
a^1 American College of Surgeons — Provisionally Approved
b American Medical Association — Internship Approved
c American Medical Association — Approved for Residency in a Specialty
d Teaching Hospital Attached to a Medical School
f Hospital Affiliation Secured to Supplement the Curriculum

Marginal Number	State / City or Town (Archdiocese or Diocese)	Name of School Address	Name of Sisterhood or Brotherhood in Charge	Year Established	No. of Students at Time of Visit	Educational Affiliation: Name and Address of College or University	Clinical Facilities: Name and Address of Hospital	Capacity at Time of Visit: Beds	Bassinets	Symbols	Marginal Number
1	**Lewistown** (G.F.)	**St. Joseph's** High and Watson Streets	Daughters of Jesus	1919	44		**St. Joseph's** 211 S. High Street	130	16	*a*	1
2	**Miles City** (G.F.)	**Holy Rosary** 320 N. Jordan Avenue	Sisters of the Presentation of the Blessed Virgin Mary	1918	52	**Custer Junior College** Miles City, Montana	**Holy Rosary** 320 N. Jordan Avenue	90	12	*a, f*	2
3	**Missoula** (Hel.)	**St. Patrick's** Owen and Pine Streets	Sisters of Charity of Providence	1908	47		**St. Patrick's** 335 Owen Street	100	16	*a*	3
	NEBRASKA										
4	**Alliance** (G.I.)	**St. Joseph's** Big Horn Avenue and W. 11th Avenue	Sisters of St. Francis of Penance and Christian Charity	1920	42		**St. Joseph's** 416 W. 11th Street	100	18	*a, f*	4
5	**Grand Island** (G.I.)	**St. Francis** 1310 W. Charles St.	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1920	68		**St. Francis** 1310 W. Charles Street	150	16	*a, f*	5
6	**Lincoln** (Lin.)	**St. Elizabeth's** 1103 South Street	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1918	75	**University of Nebraska** Lincoln, Nebraska	**St. Elizabeth's** 1103 South Street	175	25	*a, b, f*	6
7	**Omaha** (Om.)	**Creighton Memorial — St. Joseph's** 10th and Castellar Streets	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1897	133	**Creighton University** Omaha, Nebraska	**Creighton Memorial — St. Joseph's** 2305 S. 10th Street	372	39	*a, b, c, d*[13]	7
8		**St. Catherine's** 811 Forest Avenue	Sisters of Mercy of the Union	1910	66	**Creighton University** Omaha, Nebraska	**St. Catherine's** 811 Forest Avenue	165	25	*a, b, d*[13], *f*	8
	NEW HAMPSHIRE										
9	**Berlin** (Man.)	**St. Louis** 459 Main Street	Sisters of Charity — Grey Nuns	1927	19		**St. Louis** 459 Main Street	90	14	*a*	9
10	**Manchester** (Man.)	**Notre Dame de Lourdes** 337 Notre Dame Avenue	Sisters of Charity — Grey Nuns	1911	43		**Notre Dame de Lourdes** 337 Notre Dame Avenue	78	14	*a*	10
11	**Nashua** (Man.)	**St. Joseph's** 170 Kinsley Street	Sisters of Charity — Grey Nuns	1904	38		**St. Joseph's** 170 Kinsley Street	92	13	*a*	11
	NEW JERSEY										
12	**New Brunswick** (Tr.)	**St. Peter's** Easton Avenue	Sisters of Charity — Grey Nuns	1907	112		**St. Peter's** Easton Avenue	194	48	*a, b, f*	12
13	**Trenton** (Tr.)	**St. Francis** 601 Hamilton Avenue	Sisters of the Third Order of St. Francis	1905	119		**St. Francis** 601 Hamilton Avenue	289	39	*a, b*	13
	NEW YORK										14
14	**Amsterdam** (Alb.)	**St. Mary's** 427 Guy Park Avenue	Sisters of St. Joseph of Carondelet	1920	38	**College of St. Rose** Albany, New York	**St. Mary's** 427 Guy Park Avenue	100	22	*a*[1], *f*	
15	**Elmira** (Roch.)	**St. Joseph's** 555 E. Market Street	Sisters of St. Joseph	1908	75	**Nazareth College** Rochester, New York	**St. Joseph's** 555 E. Market Street	230	27	*a, b, f*	15
16	**Niagara Falls** (Buf.)	**Mt. St. Mary's** 515 — 6th Street	Sisters of the Third Order of St. Francis	1907	64	**Niagara University** Niagara Falls, N. Y.	**Mt. St. Mary's** 515 — 6th Street	179	34	*a, f*	16

17	Syracuse (Sy.)	St. Joseph's 301 Prospect Avenue	Third Franciscan Order of Minor Conventuals	1905	90		St. Joseph's 301 Prospect Avenue	205 a, b, d^{17}, f	35	17
18	Utica (Sy.)	St. Elizabeth's 2209 Genesee Street	Third Franciscan Order of Minor Conventuals	1904	84		St. Elizabeth's 2209 Genesee Street	140 a, f	20	18
19	Watertown (Og.)	Mercy 218 Stone Street	Sisters of Mercy of the Union	1905	40		Mercy 218 Stone Street	116 a, f	20	19
	NORTH DAKOTA									
20	Bismarck (Bis.)	St. Alexius 9th and Thayer Streets	Sisters of St. Benedict	1915	69		St. Alexius 9th & Thayer Streets	130 a	12	20
21	Bottineau (Far.)	St. Andrew's	Sisters of St. Mary of the Presentation	1929	30	North Dakota School of Forestry Bottineau, N. Dak.	St. Andrew's	75	12	21
22	Devils Lake (Far.)	Mercy E. 7th Street	Sisters of Mercy of the Union	1910	34		Mercy E. 7th Street	100 a	26	22
23	Fargo (Far.)	St. John's 365 Sixth Avenue, S.	Sisters of St. Joseph of Carondelet	1901	86	North Dakota Agricultural College Fargo, North Dakota	St. John's 365 Sixth Avenue, S.	155 a, b	30	23
24	Grand Forks (Far.)	St. Michael's 1320 Lewis Boulevard	Sisters of St. Joseph of Carondelet	1907	43		St. Michael's 1320 Lewis Boulevard	65 a	15	24
25	Jamestown (Far.)	Trinity 701 Third Avenue	Sisters of St. Joseph of Carondelet	1913	37		Trinity 701 Third Avenue	77	12	25
26	Minot (Bis.)	St. Joseph's 3rd Street and 4th Avenue	Sisters of St. Francis of Penance and Christian Charity	1912	48		St. Joseph's 304 — 4th Avenue, S.E.	110 a	15	26
27	Valley City (Far.)	Mercy Chautauqua Boulevard	Sisters of Mercy of the Union	1928	36	North Dakota State Teachers' College Valley City, N. Dak.	Mercy 824 Chautauqua Blvd.	100 a	15	27
28	Williston (Bis.)	Mercy Broadway and Washington	Sisters of Mercy of the Union	1920	29		Mercy Broadway and Washington	75 a	12	28
	OHIO									
29	Lima (Tol.)	St. Rita's Baxter and High Streets	Sisters of Mercy of the Union	1919	51		St. Rita's Baxter and High Streets	101 a^1, b	16	29
30	Toledo (Tol.)	St. Vincent's 2201 Cherry Street	Sisters of Charity — Grey Nuns	1896	130	De Sales College Toledo, Ohio	St. Vincent's 2213 Cherry Street	309 a, b, f	45	30
31	Zanesville (Col.)	Good Samaritan 730 Laurel Avenue	Franciscan Sisters of Christian Charity	1905	45[24]		Good Samaritan 1247 Ashland Avenue	120 a^1	20	31
	OKLAHOMA									
32	Oklahoma City (Okla.)	St. Anthony's 601 N.W. 9th Street	Sisters of the Third Order of St. Francis	1908	121		St. Anthony's 601 N.W. 9th Street	350 a, b, c, d^{21}	50	32

d^{18} Creighton University School of Medicine, Omaha, Nebraska. d^{17} Syracuse University Medical College, Syracuse, New York. d^{21} University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

SYMBOLS

- *a* American College of Surgeons — Fully Approved
- a^1 American College of Surgeons — Provisionally Approved
- *b* American Medical Association — Internship Approved
- *c* American Medical Association — Approved for Residency in a Specialty
- *d* Teaching Hospital Attached to a Medical School
- *f* Hospital Affiliation Secured to Supplement the Curriculum

Marginal Number	State / City or Town (Archdiocese or Diocese)	Name of School Address	Name of Sisterhood or Brotherhood in Charge	Year Established	No. of Students at Time of Visit	Educational Affiliation Name and Address of College or University	Clinical Facilities Name and Address of Hospital	Capacity at Time of Visit Beds	Bassinets	Symbols	Marginal Number
1	**Ponca City** (Okla.)	**St. Joseph's** 14th and Virginia Avenues	Sisters of St. Joseph	1921	40		**Ponca City** 14th and Virginia Avenues	50	12	*a*	1
2	**Tulsa** (Okla.)	**St. John's** 1802 E. 19th Street	Sisters of the Sorrowful Mother	1926	156	**Monte Cassino Junior College** Tulsa, Oklahoma	**St. John's** 19–21 S. Utica	210	40	*a*[1], *b*	2
	OREGON										
3	**Portland** (P.)	**University of Portland College of Nursing** 2475 N.W. Westover Road	Sisters of Charity of Providence	1892	198	[23]	**St. Vincent's** 2447 N.W. Westover Road	386	36	*a, b, c, d*[23], *f*	3
	PENNSYLVANIA										
4	**Allentown** (Ph.)	**Sacred Heart** 4th and Chew Streets	Missionary Sisters of the Most Sacred Heart	1916	83		**Sacred Heart** 4th and Chew Streets	294	41	*a, b*	4
5	**Carbondale** (Scr.)	**St. Joseph's** Lincoln Avenue	Sisters, Servants of the Immaculate Heart of Mary	1926	32		**St. Joseph's** 100 Lincoln Avenue	88	10	*a, f*	5
6	**Lancaster** (Hbg.)	**St. Joseph's** College Avenue	Sisters of the Third Order of St. Francis	1901	64	**Villanova College** Villanova, Penn.	**St. Joseph's** College and Marietta Streets	200	30	*a, b, f*	6
7	**Philadelphia** (Ph.)	**St. Agnes** 1900 South Broad Street	Sisters of the Third Order of St. Francis	1894	61		**St. Agnes** 1900 South Broad Street	346	78	*a*[1]	7
8		**St. Mary's** Frankford Avenue and Palmer Street	Sisters of the Third Order of St. Francis	1901	66		**St. Mary's** Frankford Avenue and Palmer Street	206	44	*a, b*	8
9	**Pittsburgh** (Pitt.)	**Mercy** Boulevard of the Allies	Sisters of Mercy	1893	199	**Mt. Mercy College** Pittsburgh, Penn.	**Mercy** Pride and Locust Streets	632	48	*a, b, c, d*[23], *f*	9
10		**St. John's** 3339 McClure Avenue	Sisters of Divine Providence	1902	98[24]		**St. John's** 3339 McClure Avenue	185	40	*a, b, f*	10
11	**Reading** (Ph.)	**St. Joseph's** Walnut and Birch Streets	Sisters of the Third Order of St. Francis	1903	89[24]	**Villanova College** Villanova, Penn.	**St. Joseph's** 1215 Walnut Street	180	25	*a, b, f*	11
	RHODE ISLAND										
12	**Providence** (Pro.)	**St. Joseph's** Peace and Broad Streets	Sisters of St. Francis of the Third Order Regular	1899	82		**St. Joseph's** Peace and Broad Streets	300	50	*a, b, f*	12
	SOUTH DAKOTA										
13	**Aberdeen** (S.F.)	**St. Luke's** 320 S. State Street	Sisters of the Presentation of the Blessed Virgin Mary	1906	65		**St. Luke's** 305 S. State Street	125	25	*a, f*	13
14	**Mitchell** (S.F.)	**St. Joseph's** 1200 E. 5th Avenue	Sisters of the Presentation of the Blessed Virgin Mary	1906	48		**St. Joseph's** 1200 E. 5th Avenue	118	13	*a*	14
15	**Pierre** (S.F.)	**St. Mary's** Dakota Avenue	Sisters of St. Benedict	1921	33		**St. Mary's** 803 Dakota Avenue	102	18	*a*	15
16	**Rapid City** (R.C.)	**St. John's McNamara** 11th and Fulton Streets	Benedictine Sisters	1927	35	**South Dakota State School of Mines** Rapid City, S. Dak.	**St. John's McNamara** 1018 — 11th Street	72	14	*a, f*	16

17	**Sioux Falls (S.F.)**	**McKennan** 7th Avenue and 21st Street	Sisters of the Presentation of the Blessed Virgin Mary	1912	67	**University of Minnesota** Minneapolis, Minn.	**McKennan** 7th Avenue and 21st Street	113	*a, f*	20	17
18	**Yankton (S.F.)**	**Sacred Heart** W. 4th Street	Sisters of St. Benedict	1903	30	**Mt. Marty Junior College** Yankton, So. Dakota	**Sacred Heart** W. 4th Street	170	*a*	20	18
	TENNESSEE										
19	**Knoxville (Nash.)**	**St. Mary's** Oakhill Avenue	Sisters of Mercy of the Union	1930	52	**Our Lady of Cincinnati College** Cincinnati, Ohio	**St. Mary's Memorial** Oakhill Avenue	63	*a*	12	19
20	**Memphis (Nash.)**	**St. Joseph's** 264 Jackson Street	Poor Sisters of St. Francis Seraph of Perpetual Adoration	1919	75	**Siena College** Memphis, Tennessee	**St. Joseph's** 264 Jackson Street	250	*a, b*	40	20
	TEXAS										
21	**Amarillo (Ama.)**	**St. Anthony's** 711 N. Polk Street	Sisters of Charity of the Incarnate Word	1911	61	**Amarillo Junior College** Amarillo, Texas	**St. Anthony's** 711 N. Polk Street	87	*a*	22	21
22	**Fort Worth (Dal.)**	**St. Joseph's** 1607 S. Main Street	Sisters of Charity of the Incarnate Word	1906	87		**St. Joseph's** 1607 S. Main Street	182	*a, b*	18	22
23	**Houston (Gal.)**	**St. Joseph's** 1910 Crawford Street	Sisters of Charity of the Incarnate Word	1905	151[24]	**University of Houston** Houston, Texas	**St. Joseph's Infirmary** 1910 Crawford Street	375	*a*	80	23
24	**Port Arthur (Gal.)**	**St. Mary's** 1931 — 9th Avenue	Sisters of Charity of the Incarnate Word	1930	64[24]		**St. Mary's Gates Memorial** 1931 — 9th Avenue	150	*a*	20	24
25	**San Antonio (S.A.)**	**Santa Rosa** 715 W. Travis Street	Sisters of Charity of the Incarnate Word	1903	143	**Incarnate Word College** San Antonio, Texas	**Santa Rosa** 745 W. Houston	290	*a, b*	32	25
	WASHINGTON										
26	**Bellingham (Sea.)**	**St. Joseph's** State and Forest Streets	Sisters of St. Joseph of Newark	1905	43	**Western Washington College** Bellingham, Wash.	**St. Joseph's** State and Forest Streets	100	*a, f*	15	26
27	**Colfax (Spo.)**	**St. Ignatius** 1109 S. Mill Street	Sisters of Charity of Providence	1908	35[24]	**Gonzaga University** Spokane, Washington	**St. Ignatius** 1109 S. Mill Street	60	*a, f*	10	27
28	**Olympia (Sea.)**	**St. Peter's** 420 Mill Street	Sisters of Charity of Providence	1919	45		**St. Peter's** 420 Laurel Street	100	*a, f*	15	28
29	**Seattle (Sea.)**	**Providence** 1715 E. Cherry Street	Sisters of Charity of Providence	1907	80	**Seattle College** Seattle, Washington	**Providence** 17th and E. Jefferson Streets	342	*a, b, f*	58	29
30	**Spokane (Spo.)**	**Sacred Heart** 101 W. 8th Avenue	Sisters of Charity of Providence	1899	171	**Gonzaga University** Spokane, Washington	**Sacred Heart** 101 W. 8th Avenue	300	*a, b, f*	40	30
31	**Tacoma (Sea.)**	**St. Joseph's** 1819 S. 1st Street	Sisters of the Third Order of St. Francis	1900	101[24]	**Seattle College** Seattle, Washington	**St. Joseph's** 19th and J Streets	279	*a, b, f*	50	31
32	**Vancouver (Sea.)**	**St. Joseph's** 12th and Reserve Streets	Sisters of Charity of Providence	1912	45	**Seattle College** Seattle, Washington	**St. Joseph's** 500 E. 12th Street	80	*a*[1]	20	32
33	**Yakima (Sea.)**	**St, Elizabeth's** 9th Avenue, South	Sisters of Charity of Providence	1910	90		**St. Elizabeth's** 110 S. 9th Avenue	194	*a*	30	33

[24] University of Oregon School of Medicine, Portland, Oregon. [24] University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania.

SYMBOLS

a American College of Surgeons — Fully Approved
a[1] American College of Surgeons — Provisionally Approved
b American Medical Association — Internship Approved
c American Medical Association — Approved for Residency in a Specialty
d Teaching Hospital Attached to a Medical School
f Hospital Affiliation Secured to Supplement the Curriculum

Marginal Number	State / City or Town (Archdiocese or Diocese)	Name of School Address	Name of Sisterhood or Brotherhood in Charge	Year Established	No. of Students at Time of Visit	Educational Affiliation: Name and Address of College or University	Clinical Facilities: Name and Address of Hospital	Capacity at Time of Visit: Beds	Bassinets	Symbols	Marginal Number
	WEST VIRGINIA										
1	**Clarksburg** (Wh.)	**St. Mary's** Chestnut Street	Sisters of St. Joseph	1905	54		**St. Mary's** 464 Washington Avenue	141	12	*a*	1
2	**Huntington** (Wh.)	**St. Mary's** 2901 First Avenue	Pallotine Sisters	1926	69		**St. Mary's** 2901 First Avenue	220	30	*a, b*	2
3	**Parkersburg** (Wh.)	**St. Joseph's** 1801 Murdock Avenue	Sisters of St. Joseph	1903	47		**St. Joseph's'** 19th and Murdock Avenues	125	12	*a, b*	3
4	**Wheeling** (Wh.)	**Wheeling** 203 Main Street	Sisters of St. Joseph	1890	65		**Wheeling** 109 N. Main Street	220	30	*a, b*	4
	WISCONSIN										
5	**Ashland** (Sup.)	**St. Joseph's** 300–324 E. Front Street	Poor Handmaids of Jesus Christ	1912	56		**St. Joseph's** 300 E. Front Street	135	15	*a*	5
6	**Green Bay** (G.B.)	**St. Mary's** 403 S. Webster Avenue	Sisters of the Misericorde	1903	47		**St. Mary's** 403 S. Webster Avenue	100	25	*a, f*	6
7	**La Crosse** (L.C.)	**St. Francis** 1020 Market Street	Franciscan Sisters of the Third Order of Perpetual Adoration	1901	100		**St. Francis** 1020 Market Street	286	36	*a, b, d*[26]	7
8	**Madison** (Mil.)	**St. Mary's** 720 S. Brooks Street	Sisters of St. Mary	1923	95	**Edgewood Junior College** Madison, Wisconsin	**St. Mary's** 720 S. Brooks Street	175	50	*a, b, f*	8
9	**Manitowoc** (G.B.)	**Holy Family** 23rd and Western Avenue	Franciscan Sisters of Christian Charity	1920	29		**Holy Family** 23rd and Western Avenue	125	20	*a, f*	9
10	**Marshfield** (L.C.)	**St. Joseph's** St. Joseph's Street and North Avenue	Sisters of the Sorrowful Mother	1914	68		**St. Joseph's** St. Joseph's Street and North Avenue	180	18	*a, b, d*[26], *f*	10
11	**Milwaukee** (Mil.)	**Misericordia** 2224 W. Juneau Avenue	Sisters of the Misericorde	1926	40	**Marquette University** Milwaukee, Wisconsin	**Misericordia** 2224 W. Juneau Avenue	114	40	*a, b, d*[27], *f*	11
12	**Wausau** (L.C.)	**St. Mary's** Maple Hill	Sisters of the Divine Saviour	1923	61		**St. Mary's** Mercy Street	120	20	*a, f*	12

[26] University of Wisconsin School of Medicine, Madison, Wisconsin.

[27] Marquette University School of Medicine, Milwaukee, Wisconsin.

SYMBOLS

a American College of Surgeons — Fully Approved
a[1] American College of Surgeons — Provisionally Approved
b American Medical Association — Internship Approved
c American Medical Association — Approved for Residency in a Specialty
d Teaching Hospital Attached to a Medical School
f Hospital Affiliation Secured to Supplement the Curriculum

SPECIAL NOTES

[1]Affiliated with this School is Mercy Hospital School of Nursing of Durango, Colorado, conducted by the same Sisters and having a student enrollment of 29 together with clinical facilities of 51 beds and 9 bassinets.

[2]Affiliated with this School is St. Mary's Hospital School of Nursing of Grand Junction, Colorado, conducted by the same Sisters and having a student enrollment of 18 together with clinical facilities of 65 beds and 12 bassinets.

[3]This School is the senior school of nursing of the Loyola University School of Nursing.

[4]This is the basic unit of the central school of nursing of which St. Joseph's Mercy Hospital School of Nursing of Clinton, Iowa, is a member.

[5]This School of Nursing is a unit of the St. Joseph's Mercy Hospital School of Nursing of Sioux City, Iowa, conducted by the same Sisters.

[6]This School is for the members of this Sisterhood only.

[7]This School of Nursing is a unit of the Mercy College of Nursing, Detroit, Michigan.

[8]This School of Nursing is a unit of the Mercy College of Nursing, Detroit, Michigan.

[9]This School of Nursing is a unit of Mercy Central School of Nursing, Grand Rapids, Michigan.

[10]This is the central unit of a College of Nursing in which the following schools, all under the jurisdiction of the same Sisterhood, participate: St. Joseph's Mercy, Ann Arbor, Michigan; Leila Y. Post Montgomery, Battle Creek, Michigan; and St. Joseph's Mercy, Pontiac, Michigan.

[11]This is the enrollment of the Central College of Nursing including, too, the subsidiary units.

[12]This hospital is only one of the several used in affording clinical experience to the students of Mercy College of Nursing, Detroit (see footnote 10 above).

[13]This is the central unit of a central School of Nursing in which the following schools, all under the jurisdiction of the same Sisterhood, participate: Mercy, Bay City, Michigan; and Mercy, Muskegon, Michigan.

[14]This is the enrollment of the Central School of Nursing including, too, the subsidiary units.

[15]This hospital is only one of the several used in affording clinical experience to the students of Mercy Central School of Nursing, Grand Rapids, Michigan (see footnote 13 above).

[16]This School of Nursing is a unit of the Mercy Central School of Nursing, Grand Rapids, Michigan.

[17]This School of Nursing is a unit of the Mercy College of Nursing, Detroit, Michigan.

[18]For male students only.

[19]Included in this number are 88 graduate nurses enrolled in Public Health Nursing.

[20]An integral part of the University, offering curricula not only in nursing, nursing education, and public health nursing, but also in the allied fields of dietetics, laboratory, X-ray and physical therapy technology, hospital administration, and medical record library science.

[21]Comprising St. Mary's Hospital, 6420 Clayton Road, a general hospital having a capacity of 315 beds and 30 bassinets; Firmin Desloge Hospital, 1325 South Grand Boulevard, a general hospital having a capacity of 223 beds and 28 bassinets together with an extensive Out-Patient service; and Mt. St. Rose Sanatorium, 9101 South Broadway, a Tuberculosis Sanatorium having a capacity of 135 beds.

[22]For colored students only.

[23]An integral part of the University offering curricula in nursing and nursing education.

[24]Accepts some male students.

KEY TO ABBREVIATIONS OF ECCLESIASTICAL JURISDICTIONS

For the benefit of those who desire to consult the "Catholic Directory," in which all Catholic Agencies are listed, the Editors have provided information respecting the Archdiocese and Diocese in which a City or Town may be located. These Abbreviations are indicated in this List by means of the scheme of Abbreviations employed by the Editors of the "Catholic Directory" and are as follows:

UNITED STATES	
Archdioceses	
Baltimore and Washington	Bal.
Chicago	Chic.
Denver	Den.
Detroit	Det.
Dubuque	Dub.
Los Angeles	L.A.
Louisville	L.
Milwaukee	Mil.
New Orleans	N.O.
Philadelphia	Ph.
Portland	P.
St. Louis	St.L.
St. Paul	St.P.
San Antonio	S.A.
San Francisco	S.Fr.
Dioceses	
Albany	Alb.
Amarillo	Ama.
Belleville	Bel.
Bismarck	Bis.
Boise	B.
Buffalo	Buf.
Columbus	Col.
Concordia	Con.
Covington	Cov.
Dallas	Dal.
Davenport	Dav.
Des Moines	D.M.
Fargo	Far.
Fort Wayne	Ft.W.
Galveston	Gal.
Grand Island	G.I.
Grand Rapids	G.R.
Great Falls	G.F.
Green Bay	G.B.
Harrisburg	Hbg.
Hartford	Hart.
Helena	Hel.
Indianapolis	Ind.
Kansas City	K.C.
La Crosse	L.C.
Lansing	Lan.
Leavenworth	Leav.
Lincoln	Lin.
Little Rock	L.R.
Manchester	Man.
Marquette	Mar.
Mobile	Mob
Nashville	Nash.
Ogdensburg	Og.
Oklahoma City and Tulsa	Okla.
Omaha	Om.
Peoria	Peo.
Pittsburgh	Pitt.
Portland	Port.
Providence	Pro.
Rapid City	R.C.
Rochester	Roch.
Rockford	Rock.
Saginaw	Sag.
St. Cloud	St.Cl.
Savannah-Atlanta	Sav.
Scranton	Scr.
Seattle	Sea.
Sioux City	S.C.
Sioux Falls	S.F.
Spokane	Spo.
Springfield	Spfd.
Superior	Sup.
Syracuse	Sy.
Toledo	Tol
Trenton	Tr.
Tucson	Tuc.
Wheeling	Wh.
Wichita	Wich.
Wilmington	Wil.

Recommendations to All Physicians with Reference to the National Emergency

Released by the Office of the Procurement and Assignment Service

I. Medical Students

A. All students holding letters of acceptance from the Dean for admission to medical colleges and freshmen and sophomores of good academic standing in medical colleges should present letters or have letters presented for them by their deans to their local boards of the Selective Service System. This step is necessary in order to be considered for deferment in Class II-A as a medical student. If local boards classify such students in Class I-A, they should immediately notify their deans and if necessary exercise their rights of appeal to the Board of Appeals. If, after exhausting such rights of appeal, further consideration is necessary, request for further appeal may be made to the State Director and if necessary to the National Director of the Selective Service System. These officers have the power to take appeals to the President.

B. Those junior and senior students who are disqualified physically for commissions are to be recommended for deferment to local boards by their deans. These students should enroll with the Procurement and Assignment Service for other assignment.

C. All junior and senior students in good standing in medical schools, who have not done so, should apply immediately for commission in the Army or the Navy. This commission is in the grade of Second Lieutenant, Medical Administrative Corps of the Army of the United States, or Ensign H.V. (P) of the United States Navy Reserve, the choice as to Army or Navy being entirely voluntary. Applications for commission in the Army should be made to the Corps Area Surgeon of the Corps Area in which the

applicant resides and applications for commission in the Navy should be made to the Commandant of the Naval District in which the applicant resides. Medical R.O.T.C. students should continue as before with a view of obtaining commissions as First Lieutenants, Medical Corps, upon graduation. Students who hold commissions, while the commissions are in force, come under the jurisdiction of the Army and Navy authorities and are not subject to induction under the Selective Service Act. The Army and Navy authorities will defer calling these officers to active duty until they have completed their medical education and at least 12 months of internship.

II. Recent Graduates

Upon successful completion of the medical college course, every individual holding commission as a Second Lieutenant, Medical Administrative Corps, Army of the United States, should make immediate application to the Adjutant General, United States Army, Washington, D. C., for appointment as First Lieutenant, Medical Corps, Army of the United States. Every individual holding commission as Ensign H.V. (P), U. S. Navy Reserve, should make immediate application to the Commandant of his Naval District for commission as Lieutenant (J.G.) Medical Corps Reserve, U. S. Navy. If appointment is desired in the grade of Lieutenant (J.G.), in the regular Medical Corps of the U. S. Navy, application should be made to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

Graduates who have failed to obtain a Medical Administrative Corps or Ensign Commission run the risk of being inducted into the military services as enlisted men under the Selective Service Acts.

III. Twelve Months Interns

All interns should apply for a commission as First Lieutenant, Medical Corps, Army of the United States, or as Lieutenant (J.G.) United States Navy or Navy Reserve. Upon completion of 12 months internship, except in rare instances where the necessity of continuation as a member of the staff or as a resident can be defended by the institution, all who are physically fit may be required to enter military service. Those commissioned may then expect to enter military service in their professional capacity as medical officers; those who failed to apply for commission are liable for military service under the Selective Service.

IV. Hospital Staff Members

Interns with more than 12 months of internship, assistant residents, fellows, residents, junior staff members, and staff members under the age of 45, fall within the provisions of the Selective Service Acts which provide that all men between the ages of 20 and 45 are liable for military service. All such men holding Army commissions are subject to call at any time and only *temporary deferment* is possible, upon approval of the application made by the institution to the Adjutant General of the United States Army certifying that the individual is temporarily indispensable. All such men holding Naval Reserve commissions are subject to call at any time at the discretion of the Secretary of the Navy. Temporary deferments may be granted only upon approval of applications made to the Surgeon General of the Navy.

All men in this category who do not hold commissions should enroll with the Procurement and Assignment Service. The Procurement and Assignment Service under the Executive Order of the President is charged with the proper distribution of medical personnel for military, governmental, industrial, and civil agencies of the entire country. All those so enrolled whose services have not been established as essential in their present capacities will be certified as available to the Army, Navy, governmental, industrial, or civil agencies requiring their services for the duration of the war.

V. All Physicians Under Forty-five

All male physicians in this category are liable for military service and those who do not hold commissions are subject to induction under the Selective Service Acts. In order that their service may be utilized in a professional capacity as medical officers, they should be made available for service when needed. Wherever possible, their present positions in civil life should be filled or provisions made for filling their positions, by those who are (*a*) over 45, (*b*) physicians under 45 who are physically disqualified for military service, (*c*) women physicians, and (*d*) instructors and those engaged in research who do not possess an M.D. degree whose utilization would make available a physician for military service.

Every physician in this age group will be asked to enroll at an early date with the Procurement and Assignment Service. He will be certified for a position commensurate with his professional training and experience as requisitions are placed with the Procurement and Assignment Service by military, governmental, industrial, or civil agencies requiring the assistance of those who must be dislocated for the duration of the national emergency.

VI. All Physicians Over Forty-five

All physicians over 45 will be asked to enroll with the Procurement and Assignment Service at an early date. Those who are essential in their present capacities will be retained and those who are available for assignment to military, governmental, industrial, or civil agencies may be asked by the Procurement and Assignment Service to serve those Agencies.

The maximal age for original appointment in the Army of the United States is 55. The maximal age for original appointment in the Naval Reserve is 50 years of age.

All inquiries concerning The Procurement and Assignment Service should be sent to The Executive Officer, 5654 Social Security Building, 4th and Independence Avenues, SW, Washington, D. C., and not to individual members of the Directing Board or of committees thereof.—January 23, 1942.

Protection of Hospitals
Medical Division—Bulletin No. 3

Prepared by the Office of Civilian Defense, Washington, D. C.

Table of Contents

Foreword
Protection of Building Fabric
Sandbagging
Protection of Basements
Protection of First Floor
Protection of Glass
Partial Obstruction of Window Openings
Glass in Skylights and Domes
Adhesive Treatments for the Protection of Glass
Ventilation
Protection Against Fire
Fire Organization Within the Hospital
Storage of Combustible Materials
Protection of the Roof and Upper Floors
Auxiliary Fire Equipment Recommended
Incendiary Bombs and their Control
Magnesium Alloy Bombs
Thermit Bombs
Phosphorus
Oil Bombs
Multiple Effect Bombs
Fire and Evacuation Drills
Rescue Squad
Air-Raid Shelters
Provision to be made for Selected Groups
Care of Bed Patients
Sites Suitable for Shelter Within Buildings
Blackout
Materials Suitable for Blackout
Methods
Curtains
Use of Shades and Blinds
Light Locks
Light Weight Screens
Lighting Within the Hospital
Removal of Unnecessary Bulbs
Use of Lights of Low Intensity
Group Control Points
Protection of Utilities
Responsibility for Maintaining Service
Organization of An Emergency Repair Squad
Mapping Distribution of Utility Services
Alternative Emergency Arrangements
Communications
Electricity
Water
Heat
Sewage
Garbage
Facilities for the Care of Casualties
The Hospital Entrance
Reception Room
Decontamination Rooms
Operating Rooms
Mortuary
Laundry
Distribution of Patients to Wards
Unit System and Reserve Stocks
Beds
Linens
Blankets
Food
Fuel
Drugs and Biologicals
Other Supplies
Stretchers
Radium
Morale
The Ambulance Entrance
Appendix

Foreword

THIS publication has been prepared by a joint committee of the Council on Hospital Planning of the American Hospital Association and the Medical Division of the U. S. Office of Civilian Defense. The committee included Dr. Robin C. Buerki, Philadelphia, and Dr. Asabel J. Hockett, New Orleans, co-chairman; Dr. Willard C. Rappleye, New York; Dr. Anthony J. J. Rourke, San Francisco; Dr. Joseph Turner, New York; Dr. Huntington Williams, Baltimore. Dr. James M. Mackintosh, former chief medical officer of the Scottish Department of Health, served as consultant. (The protective measures recommended are presented for adoption by State and local Civilian Defense Councils.) Revisions of these recommendations may be issued from time to time as new developments make them necessary.

The attention of hospital administrators and chiefs of staff is directed to the fact that all hospitals in cities exposed to enemy action are part of the Emergency Medical Service of the local and State Defense Councils and participate in the Civilian Defense program under the direction of the chief of Emergency Medical Service as integral segments of a comprehensive plan for the care of casualties. Hospital administrators should therefore acquaint themselves with the contents of Medical Division Bulletins No. 1 and 2 on "Emergency Medical Service for Civilian Defense" and "Equipment and Operation of Emergency Medical Field Units."

The installation of protective devices in hospitals is essential because the damage which might result in air raids to unprotected hospitals combined with a heavy casualty load might result in the collapse of the medical services. In a recent letter Brig. General L. D. Gasser, U. S. Army, War Department, member of the Board for Civilian Protection, said:

"From a practical standpoint, the installation of expensive protection procedures should not be undertaken except under conditions where frequent or continuous bombing can be expected.

"The military situation today does not justify any such

contingency. This does not preclude the desirability in the interest of preparedness of preparing plans so that they could be placed into operation very promptly and in an orderly manner in case of need."

The instructions within this publication cover the general principles of procedure to be observed in planning for the protection of hospitals. Regional civilian defense authorities in all parts of the country are in close touch with corps area commanders with reference to the military situation and will apprise the local civilian defense authorities as to the need for immediate installation of the protective measures discussed herein.

The Citizens Defense Corps is composed of various groups of enrolled members whose functions are as follows:

1. Air-Raid Wardens: The Air-Raid Warden is the guardian of his district who integrates within his jurisdiction all of the protective services and serves as a general supervisor of each.

2. Fire Watchers, located at points of vantage, to detect and extinguish incipient fires started by incendiary bombs.

3. Rescue Squads are groups of highly trained and specially equipped men whose function is the extrication of casualties from collapsed or demolished buildings and other points of special danger.

4. Repair Squads are groups trained and equipped to repair damage to essential services within the community.

5. Emergency Medical Field Units are groups under the leadership of doctors for the administration of essential first-aid casualties.

6. Demolition Squads are crews trained and equipped to wreck unsafe buildings or walls to reduce the hazard of their falling.

7. Decontamination Squads are trained and equipped to decontaminate areas which have been exposed to persistent gas.

8. Emergency Food and Housing Services arrange for temporary food and shelter for victims rendered homeless or destitute.

To integrate the activities of the various protective services, a central administrative unit has been established called the Control Center. Large cities and metropolitan areas are divided into districts and the administrative responsibilities of the Control Center have been decentralized by the creation of a District Control Center to govern activities within its district.

The Protective Services are set up to function as follows:

1. Military establishments within the area will notify the Control Center of the approach of hostile aircraft. The Control Center relays this information to the district Control Centers.

2. The district Control Center makes the necessary arrangements to introduce the blackout and places the various units in the Protective Service on the alert.

3. If bombs fall the Air-Raid Warden notifies the district Control Center of the place and extent of damage giving the approximate number of casualties.

4. The district Control Center directs an appropriate number of Rescue Squads and Emergency Medical Field Units (and other units as may be necessary, such as Demolition Squads, Fire Fighting Units, etc.) to proceed to the scene of the incident to carry out their various functions.

5. Casualties, following emergency care at the scene, will be dispatched to hospitals within the district.

6. When a hospital within the district has received a capacity load it will inform the district Control Center of this fact. The district Control Center will then direct that casualties be routed to other hospitals within the district until such time as they too have reached capacity.

7. When all of the hospitals within a district are filled to capacity the district Control Center will communicate this fact to the main Control Center which will direct that casualties be routed to specific hospitals in some other district.

8. All other Protective Services will act similarly; that is, so long as the district is self-sufficient it will operate as a separate unit but when outside help is necessary it may be obtained from other districts by calling upon the main Control Center.

While movements of the various units of the Protective Services may be controlled by a single administrative group, it is important that by frequent field practices the operating integration of the services be worked out. It is therefore urged that Emergency Medical Field Units participate in such exercises as frequently as possible.

Dr. George Baehr
Chief Medical Officer

Protection of Building Fabric, Patients, and Personnel

In estimating the possibility of damage to a hospital, the industrial, military, transportation and administration centers near it must be taken into consideration, as well as the number of searchlights, antiaircraft guns, and other defensive weapons in the immediate vicinity. In considering to what extent the facilities of a hospital may be employed during an incident, these various factors as well as the population density should be carefully weighed.

It is not practical to install in hospital buildings protective devices which would withstand the effects of a direct hit by a high explosive bomb. However, considerable protection may be given in some types of buildings without resorting to major structural change and it is this type of protection with which we are concerned. Buildings with a continuity of structure are least likely to be damaged. Steel buildings are most resistant to blast and in addition are very resistant to splinters and fragments. In buildings of reinforced concrete, damage due to high explosive bombs is usually local. Such buildings are especially safe from a standpoint of fire resistance. Wooden buildings are moderately resistant to blast but give little protection to splinters and are unsafe because they cannot be made fire resistant. Buildings carried on walls of brick and concrete blocks cannot be made safe except by major structural changes. No hospital building should be abandoned for structural reasons unless it is built entirely of wood, and a hazard even in peace time.

If services can be concentrated on the third floor or above, there will be considerable protection against splinters from high explosive bombs striking the ground nearby, and the danger of contamination by poisoned gas is reduced to a minimum. There should be at least two floors above the point of concentration of essential services to provide protection should explosive or incendiary bombs land on the roof. In less towering institutions where the number of floors in the upper portions of the building is insufficient for adequate protection, a moderate amount of safety for the housing of essential services may be obtained on lower floors in well framed buildings without major structural changes.

Sandbagging when properly carried out gives substantial protection but the expense of upkeep is considerable. This measure should be regarded as a temporary expedient to be replaced as soon as possible by a more permanent reinforcement.

A good deal can be done to protect basements and even

ground floors. The greatest danger is collapse of the building or the fall of heavy debris through the floors. It is generally necessary to strengthen the ceilings of basements (and ground floors, if feasible) to support debris loads that may fall upon them. British and German specifications require strengthening to carry a load from 200 to 400 pounds per square foot in masonry buildings. This is commonly secured by the installation of tubular steel or timber struts to carry the additional weight. In hospitals of less than three stories in height, the essential services should be housed in the basement. Basements offer the greatest protection from blast and splinters, but are very susceptible to earth shock. Because of the danger of transmission of earth shock a barricade should be built a foot away from the basement wall to keep persons and objects from coming in contact with a wall. Such a barricade can be made of chicken wire. Basements are further liable to the risk of flooding from fractured sewers or water mains and the accumulation of war gases. The steam, water, and gas pipes which traverse most hospital basements introduce risks which are obvious.

In basements protection against blast and splinters is best secured by removing windows and blocking up their openings by brick work. Adequate ventilation and lighting must be provided.

The ground floor cannot be so fully protected because of its exposed position. It is recommended that each window be permanently occluded to a height of six feet six inches from the floor. The window pane above this level may be protected by lowering the window below the point of permanent occlusion by replacing the glass with a glass substitute. It may be partially protected by wooden shutters two to three inches thick which reduce the danger from blast but will not prevent damage by bomb splinters.

On the other floors of a hospital there are two principal protection problems:

a) Fire prevention — which will be dealt with in a later section:

b) Protection of patients against the dangers of shattered glass.

Protection of Glass

The only really safe way to avoid the risk of shattered glass is to remove windows and other glass structures. This is feasible in some cases and to a limited extent. Cubicle walls made of glass should be removed and replaced by screens. Other glass structures in obviously dangerous positions should be replaced, where possible, by wood or plywood.

Windows on lower floors can, as previously indicated, be protected by obstructing openings to a height of 6 feet 6 inches and inserting a glass substitute in the sash. Permanent obscuration in patients' rooms and wards is contraindicated because of the therapeutic need for good light.

It is important that all glass should be removed from skylights and domes; occasionally this involves a major structural change and cannot be carried out at a reasonable cost. In such cases the well leading to the dome should be boarded over in such a way as to minimize the danger of falling glass. In addition, to protect against the elements, the glass should receive the fabric-bitumen treatment discussed later. It is impracticable to protect large plate-glass windows. The glass may be removed and the opening closed with wood, in each of which openings is incorporated one or more small windows of glass or a glass substitute according to the lighting requirements.

Most of the plans suggested for preventing the splintering of glass have been found unsatisfactory for use in hospitals. Crisscrossing glass with strips of paper, tape, or gauze; or covering the entire pane with transparent paper or cellophane will not prevent a shattering.

Although the fracture of glass cannot be prevented, various means can be adopted to reduce the danger of flying splinters. One effective method consists of gluing a sheet of muslin or pieces of net curtains to the inside surface of the pane. The net or muslin should be large enough and so applied that its edges extend beyond the pane on all sides and are firmly adherent to the sash. The materials should be pasted on with colorless glue, or flour paste with 5 per cent glycerine added, and subsequently varnished. The varnish needs renewal every three months.

Glass should be further protected by chicken-wire mesh not larger than one half inch to prevent flying splinters. The mesh should be installed as close as possible to the inside surface of the glass. If attached to the window frame the wire will prevent cleaning or reapplication of the treatments outlined above. The netting is, therefore, best attached to a separate frame fitted snugly against the window.

When windows have been broken by blast or projectiles, they may be replaced temporarily by lightweight screens of plywood, building paper or wall board which will serve to maintain the blackout and protect against the elements. The installation of a glass substitute to replace fractured windows will give the best permanent results. Where this is not feasible, part of the window may be replaced by glass or a glass substitute, and the remainder filled with wood. The darkening of windows has a bad psychological effect on patients and whatever method of glass protection is adopted, it is of great importance that windows in wards and patients' rooms be capable of being opened during the hours of daylight.

Bitumen treated fabrics: Bitumen treated fabrics applied to the OUTSIDE of windows and skylights where permanent obscuration is feasible will maintain obscuration in the event the glazing is fractured and will, in addition, prevent the scattering of glass fragments (except for small flakes). When used with wired glass or in conjunction with wire mesh close to the inside surface of the glass or wood or metal battens touching the glass, weather protection is permanent. Applications to skylights of bitumen treated fabrics are equally effective. The methods of application and specifications for materials are given in the appendix.

Ventilation

Adequate ventilation during the whole 24 hours of the day must be secured by some means because of its therapeutic importance. In the obscuration or replacement of windows, careful thought must be given to this object. Ordinarily, the air volume in the hospital ward should be changed at least six times an hour, and more frequently in hot weather. There are several methods by which this end may be achieved, but in many cases it may be necessary to adopt mechanical devices.

Suitable types of light traps for windows can be devised. These can be used whether glass is retained or replaced by a substitute. In a large ward, however, it is probable that

natural ventilation of this kind will be insufficient to maintain the correct number of air changes. Some restriction of flow, probably as much as 50 per cent, is unavoidable, for ventilators of this kind lose a great deal by friction and give rise to eddy currents. The most satisfactory and simple method of obtaining additional ventilation is to install a large electric exhaust fan, preferably in one of the window openings from which the glass has been removed.

The air inlet to the exhaust fan must be suitably protected with a light lock, designed so as not to render the fan ineffective because of friction.

In basements where windows have to be blocked up entirely, mechanical means must be relied upon solely to provide adequate ventilation. In specially constructed operating rooms the adoption of an air-conditioning apparatus should be considered.

Protection Against Fire

Each hospital should develop an organization of fire watchers and auxiliary firemen competent to deal with any emergency except a major conflagration. Such a group should be so organized and trained that it can work not only as a group but also as individuals so that separate fires may be attacked as soon as discovered. Local fire officials, many of whom have received training in fighting fires caused by incendiary bombs, should be consulted in the organization and training plans of the hospital fire fighting staff.

A group leader responsible for training and activities should be in charge of the hospital auxiliary fire force. The leader should receive thorough training from the local fire department in methods of combating incipient fires. He in turn will train the auxiliary force of the hospital and select the stations to which its members are to report at the sounding of an air-raid alarm. Fire-watchers' posts should be established in such numbers and locations that all sections of the hospital are under observation and will have adequate (first-aid) fire protection. Particular attention should be given to the attic or loft areas. The unit leader should instruct all employees as to the fire-alarm system and evacuation drill. He should instruct members of the fire-fighting force in the methods of handling a hose line. Where chemical extinguishers are employed, their care and use should be explained and drills in their use conducted. He should be responsible for making regular inspection of attics, basements, wards, and storage places, to see that unnecessary accumulations of combustibles are removed and that exits are kept open.

Hospital records, though valuable, are a source of danger from the fire standpoint. They should be transferred to a place of storage away from the building, especially if they occupy space in the basement which is needed during wartime for other purposes. X-ray films are inflammable though they may not support combustion. Those not needed should be destroyed and the remainder removed to a place of storage at a safe distance from other buildings. Storage of gasoline, ether, alcohol, and other highly inflammable chemicals should be given special attention.

Special attention should be directed to the attic and upper floors of the hospital building to render them as fire resistant as possible. Several non-combustible materials have been tested for resistance against burning and heat from incendiary bombs. These can be used in loose or granular form to cover existing wood flooring or in sheet form to cover or replace it. Materials giving protection against burning by the two-pound magnesium incendiary bomb are listed as follows:

Material	*Minimum Layer Inches*	*Wt. per Sq. Ft. Lb.*
Dry Sand	1¾	13.5
Brick dust	1½	9.5
Slate dust	1¼	5.0
Foamed slag (ground)	2	5.5
Boilerhouse ash	1¾	6.0
Limestone* screenings (passing ⅛" screen)	1¼	10.0
Concrete (including cinder concrete)	1	12 or less

*Carbonates stimulate the burning of magnesium and are not suitable for use in a removal bucket. They can, however, be used as a protective layer.

These substances may be spread over the attic floor or another joist area with a layer of ordinary chicken wide on a frame placed above the material. Whatever material is used, care should be taken to insure that the building will stand the added weight. Interior parts of the roof structure, walls, and joists may be covered with a fire-resistant plaster, as an added precaution. A coat of whitewash is of value. If the building will stand the additional weight, a 2-in. layer of sand or other material should be put on the roof if the roof is flat. It should be remembered that these loose materials will blow or wash away and increase in weight due to the absorption of water.

All areas where incendiary bombs may have to be combated should be made readily accessible. Two or more means of ready access should be available to attics and to roofs on which small incendiary bombs might come to rest. This applies particularly to flat roofs, or sloped roofs with parapet walls against which a bomb deflected by the roof might lodge. Doors or passageways should be cut through all blind partitions to allow access to every square foot of area. Where partitions serve as fire cutoffs these openings should be protected by fire-resistant doors.

If it is necessary to store material in the upper floors of the building, it should be so arranged that a clear aisle or passageway sufficiently wide to accommodate portable fire-fighting equipment extends the length of the building with numerous cross passages or transverse aisles. The hospital should supply itself with fire-fighting equipment, which should be inspected frequently to insure its constant readiness for use. The following items of equipment are recommended:

1. 12-quart buckets of water and sand to be distributed throughout the hospital at each fire-watcher post and each station for auxiliary firemen.

2. Pump-can tank-type water extinguishers also to be located at each fire-watcher station and post for auxiliary firemen. These pump-tank extinguishers should be equipped with at least 12 feet of hose and a nozzle that will provide both a spray and a solid stream.

3. A garden hose equipped with quick coupling connectors to fit domestic faucets should be located at those stations near faucet outlets.

4. A long-handled, square-nosed shovel should be located at each fire-watcher station and at a majority of the auxiliary fire fighter posts.

5. While not absolutely essential, it is desirable to provide each fire fighter and each auxiliary fire watcher with heavy gloves and a type of face protector or protective goggles.

6. Each fire watcher should be furnished with a flashlight.

7. Fire axes should be located at readily accessible points throughout the hospital and several should be located at fire-watchers' stations on the roof.

Reports of British experience indicate that sprinkler systems are very effective in dealing with fires started by incendiary bombs. If a sprinkler system has been installed it should be maintained in good condition but should not be relied upon to the exclusion of other methods of fire fighting.

Incendiary Bombs

a) Magnesium-alloy bombs.

The magnesium-alloy type of incendiary consists of a magnesium-aluminum alloy tube or case which contains a priming mixture, usually thermit; the priming mixture melts and ignites the magnesium case which burns at a temperature of about 2400 degrees F. The bombs vary in size from about 2 to 50 pounds. The two-pound variety is most commonly used at present. They are designed to ignite upon impact. The bomb is about nine inches long and two inches in diameter.

Because of the limited power of penetration of smaller-sized magnesium-alloy bombs, they tend to lodge on the roof or upper floors of a building. They rapidly burn through the floor, because of the intense heat generated, dropping to the floor below. To control the fire and limit its spread, prompt action must be taken. The intense heat generated prevents the fire fighter from approaching the bomb very closely. To do so might be dangerous, especially for the first minute because the priming mixture burns with such violence that a mass of sparks and molten metal may scatter for as much as twenty feet around the bomb. After the priming mixture has burned, the bomb can be approached and dealt with. The fire fighter should hold a table, chair, door, or some similar shield in front of him while fighting the incendiary.

The fire fighter must decide in each case whether to deal with the fire or with the bomb itself. If the fire has gained considerable headway, it should be brought under control at once. If it has not progressed appreciably the bomb should receive first attention. In the presence of large amounts of smoke, the fire fighter should keep his head as close to the floor as possible. It will usually take from five to six gallons of water to deal with the bomb alone so that ten gallons of water and preferably more should be available to control the bomb and the fire it has started. To control a fire around the bomb, a solid stream of water should be used though the solid stream of water should not be directed on the bomb itself. After the surrounding fire has been brought under control, the bomb should be attacked.

It is desirable when dealing with an incendiary bomb with a pump tank that there be at least two persons available, one to handle the hose and fight the fire and one to operate the pump tank. A third to keep up the supply of water at the pump tank by carrying buckets is highly desirable. However, two persons can manage, and even one person alone, if he tackles the job soon enough, may be able to extinguish the fire without assistance.

In combating a magnesium bomb, a spray of water is used. This does not extinguish the bomb, but causes it to burn more rapidly. The two-pound bomb will normally burn from ten to fifteen minutes, but when sprayed with water the burning time is reduced to two or three minutes. When the water is added to a burning magnesium bomb hydrogen is formed. This burns harmlessly if the water is added slowly in the form of a spray; but if a solid stream is used, the hydrogen is formed in such quantities that an explosion usually occurs.

Dry sand or earth in pails may also be used in combating magnesium-alloy bombs. The bomb should not be attacked until after the first minute, during which time the priming mixture burns itself out. A protecting screen, a chair, table, or other suitable object, is held in front of the fire fighter who approaches the bomb with a pail of sand and a long-handled shovel. About three quarters of a pail of sand is placed around and over the bomb with the shovel. This reduces the amount of heat given off and shields the dazzling glare of the burning metal permitting closer approach. It should be realized, however, that a bomb thus covered is not extinguished and will burn through a floor in a few minutes unless removed. The bomb may be scooped up in the shovel and placed in the sand pail. A 4-in. layer of sand should first be placed in the receptacle to prevent the bomb from burning through the bottom before it can be removed from the building.

Chemical extinguishers: Carbon tetrachloride extinguishers should never be used on thermit or magnesium bombs as phosgene may be formed by reaction with the molten metal. Soda-acid and foam-type extinguishers are effective but no more so than water alone. Since it requires five or six gallons of water to deal with a single two-pound bomb, several 2½-gal. hand extinguishers would be required. Carbon-dioxide extinguishers have been found ineffective.

b) Thermit Bombs.

Thermit consists principally of a mixture of powdered aluminum and iron oxide. This mixture when ignited reacts chemically to form molten iron which acts as the incendiary in igniting adjacent combustible material. The chemical reaction is very rapid and violent. As a direct incendiary agent, thermit is not as effective as magnesium alloy. A ten-pound thermit bomb expends itself in slightly less than a minute. The mass of molten iron set free burns itself through floors and ceilings very rapidly. The methods described for controlling the magnesium bomb will have little use in the case of thermit because of the short period of time required for the bomb to expend itself, and the spattering of burning material from the bomb. The auxiliary fire force should attack the fire with a regular hose stream and call the local fire department if necessary.

c) Phosphorus.

A small explosive charge is usually incorporated in phosphorus bombs to scatter the incendiary agent, thus starting many small fires simultaneously in a number of places. White phosphorus ignites spontaneously in exposure to air. The pellets have a low combustion temperature and may set fire to easily combustible material, though ineffective on planks or heavy wood construction. The burning phosphorus may be extinguished with plain water since air is excluded. A copper-sulphate solution may be used as a spray on burning phosphorus particles depositing a thin coat of copper phosphide over the pellet. Whether extinguished by water or chemical, all the pellets must be removed and disposed of by burning. If a pellet treated with copper is not removed, it may be stepped upon or otherwise abraded so as to fracture its surface and thus cause another fire. Care should be exercised in dealing with phosphorus because painful burns will result if it comes in contact with the skin and also because of the effect of systemic absorption. No alarm need arise from the intense white smoke produced by burning phosphorus. It may prove slightly irritating to the nose and throat but serious consequences will not result.

d) Oil Bombs

Oil bombs are usually composed of a solid inflammable oil such as aluminum stearate mixed with a highly combustible material such as gasoline or kerosene. The oils may be ignited by a small incendiary unit. Finely divided metallic sodium or potassium may be added to reignite the oil in case it comes in contact with water. Oil bombs are usually reserved for military objectives. Fires caused by oil bombs present the same problems as the ordinary oil fire in which the burning oil must be smothered with some non-combustible material such as steam, fine water spray, or foam while the fire beyond the limits of the oil is either smothered or extinguished with water. An oil bomb containing metallic sodium or potassium which burns or explodes may be encountered. The best method of dealing with such a bomb is to smother it with sand or let it burn itself out while keeping the surrounding area wet and allowing no water to reach the bomb.

e) Multiple Effect Bomb

This is usually a large bomb containing many small incendiary units with the interstices between the units filled with phosphorus or oil. The large bomb usually penetrates the building after which the case is ruptured by an explosive charge which ignites and scatters the smaller incendiary units and materials. Each unit and material must be dealt with individually as previously described.

Fire and Evacuation Drills

Every hospital should institute at once a system of fire and evacuation drills with practices held at frequent intervals. Certain considerations deserve special attention.

1. The frightening of patients by the ringing of alarms and the carrying out of drills must be avoided.

2. The hospital staff changes every eight or twelve hours and there must of necessity be trained forces for each shift of duty.

Audible alarms, where they may be disturbing to patients, should be wholly or partly suppressed during fire and evacuation drills. This may be accomplished by having an alarm system so designed that the signals will sound only in departmental offices, engine room, auxiliary fire-fighting stations, and other important central locations.

All exits from the hospital must be inspected to see if they are suitable for evacuation purposes. The doors should open outward and several exits should be available lest some be blocked by debris. Such exits may be provided by the removal of windows at convenient points and replacing these windows with shutters. All exit openings must be large enough to accommodate stretchers easily and if patients are to be moved on mattresses, they must be sufficiently wide to accommodate a mattress.

In anticipation of the possible need for evacuation of a hospital, ambulatory and convalescent patients should be housed as much as possible on upper floors, the lower floors being reserved for wheel-chair and stretcher patients.

During the evacuation drills ambulatory patients when instructed to do so, put on dressing gowns and slippers, pick up their blanket, and leave the building. All the patients from one floor are accompanied by a single person. Patients in wheel chairs follow and patients on stretchers leave the hospital last, accompanied by attendants.

A nurse, orderly, or ambulatory patient should be assigned to each bed occupied by a wheel-chair patient in order that such patients may be helped from their beds to wheel chairs. Other assignments should be made to insure that there are sufficient persons to move stretcher patients. If long and sustained bombing is anticipated it may be necessary to nurse patients on canvas stretchers under the bottom sheet. Four or five strong canvas loops may be attached to the mattress so that it may be used as a stretcher.

No specific directions have been given in this section on the details of hospital evacuation and fire drills because such details must of necessity depend upon the structural characteristics of the particular hospital in question.

Rescue Squad

A Rescue Squad should be organized within the hospital along the lines recommended in the Handbook of Rescue Squads, a copy of which may be procured from your State Defense Council. The squad should be composed of a leader and four or five members, all of whom should be from the service department and who understand utilities and construction. The utility repair squad discussed in a later section may also fulfill the responsibility of the rescue squad. The Rescue Squad is responsible for the extrication of persons from points of special danger. The members should also notify the police of the location of unexploded bombs, rope off the danger area, and notify the telephone switch board of the presence of the unexploded bomb.

Air-Raid Shelters

The provision for complete protection for all patients and members of staff is seldom possible. Certain measures of protection have already been suggested, but actual shelter provision should be confined to the following groups:

a) Those who are working on essential services on which the functioning of the hospital depends; e.g., telephone operators, emergency operating-room staff, and certain key administrative officers, air-raid wardens, etc.

b) Nursing and domestic staff who are off duty.

c) A limited number of ambulant patients who can easily be transferred to shelter.

Bed patients should be moved into corridors away from the immediate vicinity of windows, and covered as far as possible with bed clothes, bed tables, and other materials that offer protection against splinters.

Shelters within buildings are readily accessible, can be made comfortable, and can be provided with the usual services.

The same sites previously discussed as being suitable for the housing of essential services within the hospital are also ideal for air-raid shelters.

Shelters within buildings should be well isolated from light and elevator shafts. Several small shelters are preferable to a single large one and not more than fifty persons should be assigned to any single shelter.

If an air-conditioning system is not installed ventilation must be provided in some other way. The inlet for such a system should be not less than 25 ft. above the ground or other horizontal surface which might become contaminated by gas. Steam, gas, and water pipes and those carrying refrigerants should not traverse or enter the shelter because of the danger of fracture. The ideal heating system is electrical. If steam or hot water must be used to heat the shelter, valves should be so labeled that the most backward patient could manipulate them. If space is limited, shelves can be built around the wall to hold bassinets for babies and bunks with sides for small children. A barricade of chicken wire should be placed six inches from the wall to prevent the transmission of shock from the wall. Some provision should be made for hot drinks and emergency feeding. Drugs and dressings to be used in an emergency should be kept in the shelter under lock and key.

Blackout

The blackout introduces the problem of preventing the egress of light, no matter how small and faint, which might be seen from the outside, and at the same time maintaining sufficient light for the performance of essential services within the hospital.

As already described, skylights and domes should be boarded over with timbers which have been fireproofed, or the glass should be protected by the bitumen-fabric treatment.

Shades and curtains already in use are not likely to be satisfactory for blackout purposes, since for a successful blackout they must extend at least six inches beyond the frames on each side and at the top and bottom. Any sort of black cloth which is opaque to light can be used, but this property should be tested not by daylight but by holding the cloth against a strong electric bulb to make certain that no light whatever shines through it. In addition to its property of opacity, the material should also possess durability, permanence of dye, mechanical strength, resistance to dampness, and preferably be noninflammable. The best kind of curtain is made in a single piece. It is hung on one side of the window in such a way that it can be drawn across from side to side without a parting in the middle. The free end can be fixed to the wall by snap fasteners. The other side is fixed permanently to the wall with a thin strip of wood. The upper edge is supported on a piece of picture wire.

Very large windows can be covered with strips of carpet stitched together and attached to a strong roller. If new shades or blinds are procured, they should be large enough to overlap the whole window opening by 6 inches on each side or be inclosed in box fittings. Tarpaulins should be kept in reserve as temporary covers to prevent exposure of light in the event that the existing arrangements are destroyed during a raid.

An additional blackout precaution is to paint an area about 12 inches wide around the window frame with matt black paint to minimize the reflection of light. A simple light trap can be constructed by using strips of beaver board or similar material 4 to 6 inches wide in the form of a box to guard against the escape of light through cracks above or around shades or curtains.

For rooms in constant use for administrative purposes it will often be more economical in the long run to provide well-fitting lightweight screens which can be removed in the hours of daylight.

Doors opening to the outside must be protected against the escape of light. While the use of double, windowless doors is sometimes feasible, the provision of a light lock is generally much more satisfactory. These are easily constructed, using either canvas or wood. Light locks through which patients are admitted must, of course, be large enough to take stretchers easily.

Lighting Within the Hospital

The interior of the hospital should be examined by night in order to determine what lights can be dispensed with entirely without loss of efficiency. Unnecessary bulbs should then be removed. Lights of reduced candlepower can be substituted for bright lights in corridors and other places where good lighting is not a necessity. The use of small bulbs screwed into baseboards should also be considered, and lights which can be dimmed by the use of resistance coils can be installed in wards and siderooms. Reduced intensity lights are now being commercially developed for blackout and may be used inside or outside of buildings.

Cylindrical tubing of tin or black cardboard, cut to the proper size, can be placed over unprotected bulbs to throw the light downward in a circle and prevent the rays from spreading. Desk lights should be provided with dark shades.

In accident rooms, where good light is essential, the blackout arrangements should be carried out with scrupulous care. Incandescent bulbs of low intensity properly hooded may be used. Direction signs can be marked by broad, heavily painted white stripes a few inches above the floor or street level.

It is desirable that lights be connected to group-control points so that they can be extinguished instantly in the event of damage to the premises causing exposure of lighting. These control switches should be located at convenient points throughout the hospital. As soon after the receipt of an air-raid warning as the necessary, prearranged precautions for protection, evacuation to shelters, etc., have been carried out, all lights, except those essential for the operation of the hospital, should be extinguished. The work required to complete blackout arrangements in a hospital is difficult and time consuming: hospitals should be in a position to complete their lighting restriction measures within a few hours' notice. The preparation of equipment cannot be deferred until lighting restrictions take effect.

When lighting restrictions have been introduced, every window, transom, and door should be individually inspected, to be certain that the blackout is complete. The inspection should be carried on outside the building, by competent, reliable observers, who preferably have had nothing to do with the installation of blackout devices. The inspection must be carried out routinely and repeatedly, to be certain that precautions are not being relaxed. These tests made by the hospitals themselves are in addition to the surveys which will be carried out under the jurisdiction of air-raid wardens.

The State and Local Defense Councils will provide the general rules for blackout. These should be posted in conspicuous places throughout the hospital, and should be supplemented by such rules as the hospital authorities have made for the behavior of patients and staff.

Utilities

Protection

Although the maintenance of essential services is the joint responsibility of utility companies and the State and local defense authorities, the hospital must also share in this responsibility.

To assume this responsibility, the hospital should organize an emergency repair squad. Their duties should include shutting off illuminating gas, refrigerant, steam, and nonessential electric lines and making such emergency repairs as may be required to limit the damage or loss of a utility service. The dispatch of such a crew should be handled by the control office center within the hospital. Such a crew should be composed of a foreman and four or five men all selected from personnel normally performing the repair work of the hospital. This same group may serve as a Rescue Squad, the functions of which have already been discussed.

Most hospitals already have maps showing the distribution of their essential services, such as electricity, heat, water, telephone, and sewage. If maps do not already exist, they should be made promptly. Important valves, flanges, switches, etc., should be identified by special colors, preferably corresponding to the code of the American Society of Mechanical Engineers. The maps, code colors, and other essential data should be placed in several parts of the hospital and at least

78825

one person should be in the hospital at all times during the day and night who knows where they are and how to interpret them.

In the event of a break down of the essential utilities within the hospital every effort should be made to restore service as quickly as possible. It is the duty of the hospital to protect its own equipment as well as possible. Reinforcement of the walls and roofs, housing the engine room, sandbagging the points of entrance and exit of pipes, drains, and cables, will be of value. Pipes should be valved at their point of entrance to the building. The telephone switchboard, which is especially sensitive to earth shock should be placed well away from walls which might transmit the shock and on the second or third floors of buildings of five or more stories.

Alternative Emergency Arrangements

Communications

The private branch exchange, such as is used in most hospitals, is often powered with batteries, but the entire telephone system within the hospital may be disrupted or destroyed. Boy and girl scouts can be used for carrying interdepartmental messages in the event the switchboard is thrown out of use and even before that time their services will relieve the congestion in the telephone room. Special messengers are needed for communications outside the hospital and arrangements for their services should be made through the communications officer at the District Control Center.

Electricity

The estimated peak demand of ½ KW per bed per day, half of which is for laundry purposes, may far exceed the amount of electric current which could be furnished in an emergency. It is rarely practical to maintain the X-ray department if the public electric supply is interrupted because of the difficulty in obtaining a generator of sufficient size. A supply of copper wire should be available for use in the emergency repair of disrupted power lines. If a power generator is to be procured it should provide sufficient current to supply:

1. lighting for emergency operating rooms, essential corridors, control office, telephone exchange and reception rooms.
2. at least one elevator.

Even small power plants have been found adequate to maintain services of this extent for short periods of time. Auxiliary electric systems should be tested out once a week or at least once a month to ascertain whether they are in proper condition.

Provision for lighting at essential points should be made in case the auxiliary system is destroyed. Portable operating-room lights powered by individual batteries have proved satisfactory and many hospitals already possess them. Dry-cell batteries are subject to deterioration in periods of inactivity and British experience would indicate that for this reason the accumulator type of battery is to be favored. Candles are obviously dangerous, and though they should be provided along with stands, they should not be used except as a last resort. Employees should be supplied with flashlights, the condition of which should be checked periodically. The use of flashlights must conform to regulations of the blackout.

Water

It would be well for hospital administrators to request the advice of municipal water departments as to how their water supply could best be protected, and supplemented and auxiliary supplies secured and maintained. In some instances this may be accomplished by tapping additional water mains or by other means. It is not feasible to dig wells because of danger of contamination from fractured sewers.

Hospitals should make plans for the conservation of water in event of emergency. A supply of paper eating utensils may be secured.

Because of the importance of the water supply for fire-fighting purposes, an interruption should be anticipated by storing water in bath tubs, and other suitable receptacles at the close of each day. More permanent storage would be desirable when it is necessary to conserve the supply.

Emergency rations for use in shelters and wards can be stored in bottles.

Heat

If the heating system is disrupted, the staff can be kept warm by wearing additional clothing and the patients by remaining in bed and using additional covers, or hot-water bags. Hot-water bags for this purpose may be improvised in most hospital workshops by cutting a discarded inner tube into sections, sealing one end, and incorporating a stoppering device in the other. Kerosene or gasoline heaters are unsafe because of the risk of fire and because of the danger of carbon monoxide gas, a danger which is accentuated in the presence of blackout.

Sewage

If fractures occur in sewer pipes which are below the lowest point in the hospital, gravity will prevent flooding. So long as sewage will flow through them under such circumstances they should be used. If the fractured pipe is above the lowest point in the hospital the overflow will accumulate in the basement and other dependent portions of the building. The sanitary dangers imposed by a break in the sewage system are obvious. If prompt repair is not possible, such temporary measures as may be necessary for the protection of patients should be instituted. Evacuation should be a last resort, and would not generally appear to be necessary.

Every hospital should be supplied with latrine buckets which could be used in case of an emergency, one bucket being provided for every 50 persons. Pre-arranged plans for collection should be agreed upon with the proper public officials.

Garbage

It should be anticipated that in emergency conditions there would likely be an interruption of garbage collections. Garbage suitable for swine may be accumulated for their use subject to the regulations of the sanitary code. What remains should be incinerated. Hospitals which do not always have an incinerator should consider the advisability of securing one. Incineration must be carried out in such a way that it does not violate the regulations of the blackout. It may be advisable to consult the local or State Health Department in regard to emergency disposal of garbage. Burying, or hauling are possibilities.

Facilities for the Care of Casualties

Hospitals intended for the immediate treatment of air-raid casualties should organize facilities so as to provide the following:

1. *Hospital Entrances*

Clearly marked entrances and routes for walking cases, stretcher cases, and gas casualties.

Wherever it is possible separate entrances and approaches to the hospital should be provided for stretcher cases, ambulatory patients, and those suffering from the effects of gas. Gatemen posted before the hospital should direct the patients to their proper entrance. Where only one entrance is available the three types of casualties must be directed to separate admitting rooms, one for gas-contaminated cases, one for walking injured, and one for stretcher cases. If it is

impossible to provide more than two admitting rooms, stretcher and ambulatory cases can be assigned to one and gas cases to the other. If only one admitting room is possible, no person contaminated with persistent gas should be permitted to enter unless the hospital is reserved for the care of those injured by persistent gases, in which case other types of casualties should be refused entrance.

The admitting entrance to the hospital should be as wide as is convenient and should at least accommodate an ambulance easily. To assist ambulance drivers working under the conditions of the blackout, the following markings should be applied with white paint to indicate the route to the admitting entrance.

a) Lines in lengths of 1 foot and with one foot gaps on vertical structures such as trees and corners of buildings; and on horizontal faces of curbs at intersections, corners, and places where road widths alter abruptly.

b) A continuous white line down the middle of the drive. Arrows or other suitable markings should be used to indicate points at which ambulances are to stop and back to the reception platform. Similar white arrows should be used to direct ambulances to the exit.

Such devices, though suitable for lighted vehicles, will not serve to give directions to walking cases. Illuminated signs provided with approved hoods should be used to indicate both the entrance to the hospital, and the reception entrance for walking wounded and contaminated cases, respectively.

2. *The Reception Room*

In the event of an air raid it should be anticipated that patients will be brought to the hospital in large numbers. The reception room must, therefore, be commodious and so arranged that members of the staff can keep all the patients in it under continuous observation. In the larger hospitals it may be more efficient to provide separate rooms for males and females, but in small units this increases the number of staff required to handle patients to such an extent as to interfere with the operation of the hospital as a whole. In such cases separation by screens is sufficient if separate toilet accommodations are provided.

The reception room serves three main purposes:

a) As a waiting and observation room before distribution to operating rooms, wards, etc.

b) For making and checking records.

c) For the continuous supervision and sorting of cases requiring resuscitation or other forms of urgent treatment. This function must be carried out by an experienced physician.

Because of the nature of the work it is expected to perform, the reception room should be closely related to the resuscitation and transfusion rooms and to the minor surgical room.

3. *Decontamination Rooms*

The subject of chemical warfare is discussed extensively in *First Aid in the Prevention and Treatment of Chemical Casualties* and *Protection Against Gas,* published by the U. S. Office of Civilian Defense, copies of which may be secured from the State Defense Council. This paper will discuss the arrangement but not the operation of the decontamination rooms. Decontamination stations operate most efficiently when well separated from the hospital. Even if this were attempted a certain proportion of patients would be brought to the hospital in a contaminated state and it is therefore necessary for hospitals to make arrangements to accommodate them. The arrangements and the general description may be found in *First Aid in the Prevention and Treatment of Chemical Casualties.*

The arrangement of the decontamination station need not be elaborate but certain essential features must be provided. These include a room in which contaminated clothing may be removed and stored in bins, a second room where the process of decontamination can be carried out, and a third room where patients can be reclothed and temporary dressings applied to wounds. From this point patients should be sent to the minor surgical clinic, to the resuscitation room, directly to a hospital ward, or such other disposition as may be dictated by the nature of the case in hand.

Attendants in the gas-decontamination room wear respirators, special gasproof gloves and clothing. Ordinary rubber gloves are not gasproof and should not be depended upon. These garments are awkward to work in, so that repeated rehearsals are necessary. Also they are likely to deteriorate, and inspection must be carried out at regular intervals. The ordinary gas mask furnishes effective protection of the lungs and eyes against every type of gas likely to be used by the enemy.

Bandage scissors provided for the decontamination room must have unusually large finger holes, to permit their use with the type of gloves which must be worn.

The ventilation of the decontamination room must be adequate to prevent the accumulation of gases in it. When the special emergency is over, everything in the room must be scrubbed with chloride of lime, the walls and floors must be hosed, and the room left open to the air for 24 hours or more.

Various methods have been devised by which those in the field can be taught to recognize and distinguish the various gases by their odor and general characteristics. However, the clinician, far away from the field of activity will frequently be confronted with the need for differential diagnosis on the basis of signs alone. It is essential that differential diagnostic criteria be formulated so that contaminated patients will not be admitted to the hospital and so that persons suffering from the effects of nonpersistent types of gases will not be subjected to decontamination procedures which might jeopardize their lives due to the great pressure under which physicians may be obliged to work in some of our large cities at such times. An accurate diagnosis cannot always be made after the superficial examination which patients may receive. A rule of thumb diagnostic differentiation may be made on the following bases: The points to be noted are:

1. Is the patient wearing a mask?

2. Is the patient breathing easily? (Patients wearing a mask will be breathing easily. Patients suffering from lung damaging gas cannot stand the restriction of respiration caused by a mask.) If the patient is breathing easily, treat as persistent gas. If the patient is breathing with difficulty treat as phosgene.

4. *Operating Rooms*

Operating rooms situated on the top floor with large windows and skylights are obviously unsuitable for use during air raids. It will be necessary to plan alternative rooms for use in the event of an emergency. Such rooms should be on the protected lower floors or in the basement. They should be as convenient as possible to the reception room. Taking into consideration the number of staff men who will be available to man them, the number of rooms provided should be in proportion to the number of casualties which may be expected. If it is anticipated that the period of emergency may be prolonged it may be worth while to consider the installation of an air conditioner. In any case proper ventilation should be provided. The emergency operating rooms should be large enough to accommodate two tables at a time. One anaesthetist can then handle two cases. The number of nurses is likewise proportionately reduced.

Because of the high percentage of fracture cases among air-raid casualties, special provision should be made to expand the facilities for their accommodation. This may mean adding to the number of fracture tables and fracture beds already in the possession of the hospital. If the closed treat-

ment of wounds is to be used this will further add the requirement for plaster tables.

5. *Mortuary*

Experience in air raids has indicated that the death rate may be 30 to 50 per cent of all casualties. While many of the vicitms may be pronounced dead at the scene of the incident and taken directly to the public morgue, many may reach the hospital in a moribund state and others may die after admission.

Those victims who die enroute to the hospital should be removed immediately to the mortuary on arrival, both to spare the feeling of the living and to make room for those for whom something can be done. Because of the need for all available space to accommodate the injured, the mortuary should be in another building adjacent to the hospital if possible. Identification should, if possible, be made before the victim is transferred to the mortuary.

The importance of securing additional staff for mortuary work should be stressed. Nurses whose services should be devoted entirely to the care of the living should not be used to attend the dead. The work of identification, even in the wards, should be carried out by trained lay workers. Bodies should be properly prepared before being shown to relatives or friends. The Health Department will make the necessary arrangements for release of bodies.

The importance of postmortem examinations should not be forgotten and permission should be sought in all feasible cases.

6. *Laundry*

Usually it will not be practical to expand the existing laundry facilities of the hospital because of the expense involved and the difficulty in procuring the needed equipment. As it is difficult to determine the extent to which expansion of facilities may be required, it is usually more economical to utilize the services of commercial laundries. The capacity of the existing hospital laundries can be expanded by shortening the washing formula, though this should not be carried beyond the point of safety.

Distribution of Patients to Wards

Wards should be opened as the need for them is demonstrated. Patients should be distributed to the various wards by the admitting officer. To lessen the strain on the nursing staff, severely injured patients should be evenly distributed over several wards. It is particularly unwise to assign many burn cases to a single ward because of the nursing demands of such cases. A special ward should be reserved for obviously moribund patients for psychological reasons.

Unit System and Reserve Stocks

The various departments of the hospital must anticipate the possibility that part or all of their working supplies may be destroyed or otherwise rendered unusable through accident. This applies to the pharmacy, emergency operating rooms, reception room, and delivery rooms. A plan should be prepared whereby operation could be carried out at some other location should its original location or part of its equipment be destroyed.

Such a plan would necessitate the maintenance of reserve stocks of essential items. Before additional supplies and equipment for this purpose are purchased a careful survey should be conducted to determine what equipment and supplies are on hand and what could serve as substitutes. Purchases should not exceed the anticipated demands of the hospital. It would be advisable to plan a program of this nature on a long-range basis, with purchases systematically spaced as funds are available.

Hospitals in the same community could profitably undertake such a program as a joint project, since it is unlikely that all of the hospitals of a community would be seriously damaged in an air raid. Such stores should include folding beds, mattresses, linens, blankets, and drugs which should be placed in a central depository and drawn upon as needed by the various members of the pool.

Beds

An adequate number of folding beds should be on hand so that they may be put up in the places determined at the time of the survey of the hospital. They should not be set up permanently until their need is demonstrated, but rehearsals should be carried out so that they can be set up rapidly when the need arises. Because of the number of fracture cases which can be expected among air-raid casualties it would be wise to increase the number of fracture beds on hand.

Linens

The amount of bed linen to be laid in should be in proportion to the increased bed capacity of the hospital and in addition should be sufficient to accommodate the work to be done in the reception and operating rooms.

Blankets

There is a very high incidence of shock among air-raid victims, and it will therefore be necessary to increase the stocks of available blankets. An adequate number should be on hand to meet the demands of the increased bed capacity, the work in the reception and operating rooms, and the number required for ambulance transport.

Food

A supply of nonperishable foods should be laid away in a special larder, preferably in a safe place in the hospital. The food in this larder should not be used except in case of emergency. As boxed or canned foods are used, they should be replaced by a systematic plan of rotation.

Because of the danger of contamination of food by chemical warfare agents, stores of food should not be kept in the open. If stored in warehouses, they should be placed on the upper floors where gas contamination is unlikely. Meat in cold storage is generally regarded as safe from contamination by gas. If it is suspected that food has been contaminated samples should be submitted to the Health Department for examination.

Fuel

Supplies of fuel should be accumulated to meet the demands of a possible emergency, taking into consideration the available space for storage of such material.

Drugs and Biologicals

Many drugs now in common use are likely to become scarce because the source of supply has been or may be cut off. Although the justifiable use of drugs should not be curtailed, unnecessary use should be avoided so as to conserve our limited supply.

Drugs which are likely to be needed in excessive amounts include the sulphonamides, morphine, tannic acid, gentian violet, sera of various type, particularly for tetanus and gas gangrene, oxygen, and the intravenous solutions, glucose and saline.

Because of the need for blood for transfusion (both whole blood and plasma or serum) due consideration should be given to desirability of establishing a bank within the hos-

pital. It may be practical in some instances for a single hospital to serve as the collecting and distributing agent for a number of neighboring institutions. In any case, each hospital must have facilities for the storage of blood, or its products for transfusion purposes.

Other Supplies

The incidence of shock in air-raid victims emphasizes the importance of having an adequate supply of hot-water bottles and heat cradles.

Because wounds in air-raid victims are extensive and often multiple it will generally be necessary to increase the equipment needed to sterilize dressings, the number of dressing carts, and the supply of dressings on hand.

To care for the large lacerated wounds of the extremities so common in air-raid victims an unusually large store of plaster-of-paris bandages and splints should be provided. Additional oiled silk may be needed for the treatment of burns depending on the form of treatment to be followed.

Provision of special instruments for the operating room should be held to the minimum. Surgeons should be encouraged to improvise or to get along with less complex and more easily procured equipment.

Other equipment which will probably be needed in excess of peacetime demands includes nasal catheters (for oxygen), BLB, or similar masks, and blood-pressure cuffs. It will generally not be necessary to purchase any extra sphygmonanometers although an additional supply of cuffs are needed which, left in place on patients under observation, can be plugged into the sphygmonanometer gauge as needed.

A reserve of parts which are likely to break down in electrical or plumbing equipment should be available.

Supplies of cigarettes and hard candy should be on hand in that part of the building to be used as an air-raid shelter.

A number of larger city hospitals carry a considerable quantity of apparatus and equipment which in time of war would be difficult to replace. In addition, such hospitals may be obliged to reduce their bed capacity and perhaps abandon operating rooms because of their exposed position. Their valuable supplies must be conserved, and it is suggested that they be transferred to safe areas or loaned to base hospitals affiliated with the central unit. Such equipment might include portable X-ray apparatus, microscopes, incubators, certifuges, etc.

Stretchers

An increased number of stretchers will be required both to accommodate the increased number of stretcher patients brought in and as a reserve on hand so that ambulances need not be delayed while stretchers brought in by them are being unloaded. Stretchers which combine the features of durability, comfort, and low cost should be secured.

Radium

Special consideration must be given to the protection of radium, not only because of its financial and therapeutic value, but also because of the risk of its dispersion. The amount of radium possessed by any institution is usually small, and the containers in which it is kept are also small. The blast of high explosive bombs may hurl the containers to great distances making location difficult; or a container may be broken and its contents dispersed. In that event, the buildings and sites of dispersal would be unsafe for many years unless cleared by specially protected workers. Until then it would probably be safer to abandon them for the inhalation even of a small amount of radium (1/1000 mg.) may be fatal.

The first step in safeguarding the supply of radium is to make a census of the amount in each location. In wartime it would be safer to use radium in the form of radon, which could be prepared in an extraurban area.

If possible, radium itself should be used only during daylight hours. Surface applications may be safely employed if a person is designated to remain with the patient and to remove the radium immediately and place it in storage in the event of an air-raid warning. If the application is made internally, the body of the patient would probably serve as an adequate shield.

Opinions differ as to how radium should be stored. Concrete buildings and bulletproof safes, with walls at least three inches thick, have been proposed but are not practical. Some hospitals in London have wells thirty to fifty feet deep, into which the radium is lowered and from which it is raised in a specially built, protected bucket. Whatever plan is employed, the radium should be kept in some place in which the risk of a direct hit is minimal. An underground storage place is best. Radium should be assigned to the custody of two or more persons properly instructed in the risks of its exposure and dispersion.

Morale

Possibly the most important single need in a hospital during wartime is to make the entire staff comprehend that preparations must be made on the basis that an emergency is positively going to occur rather than that it is likely to occur. No opportunity must be lost of convincing the staff and the general personnel of the seriousness of the emergency which may arise, even though there is no present evidence of it, and of the importance of the preparations which must be made to combat it. Overtime work and the sacrifice of personal comforts are universal during an actual emergency, but the maintenance of morale is always difficult during a period of inactivity.

A well trained, conscientious staff makes for calm patients and averts the risk of panic in an emergency. Therefore discipline must be strict and unremitting at all times, and no laxity of any sort must be permitted.

Regular rehearsals must be carried out in every department. They should include the driving, loading, and unloading of ambulances in a blackout; stretcher bearing; fire drills and the evacuation of wards; working in the operating room and elsewhere in gas masks; working in the hospital generally in blackout conditions. Mobilization of Emergency Medical Field Units and field drills should be carried out weekly in association with extramural Reserve Medical Squads, Reserve Squads, and fire auxiliaries. These rehearsals should be serious from start to finish.

The Ambulance Entrance

As previously indicated separate entrances should be provided for the admission of walking wounded, stretcher cases, and gas cases. The ambulance drive should be so arranged that unnecessary turns are eliminated and ambulances may leave by another route. Unnecessary turns at the admitting platform should be eliminated and arrangements should be made accordingly.

Using a suitable plan, a barricade should be erected on two sides of the reception platform. The barricade must extend at least to the top of the door to the reception room. The

barricade not only serves to protect those working on the platform but will also prevent direct access of blast to the reception room. A cover of heavy canvas extending from the hospital building to the top of the barricade will maintain blackout and permit sufficient light for unloading operations. Having discharged its load the ambulance should be furnished with a fresh supply of blankets and stretchers. Time should not be lost in transferring patients from stretchers brought by the ambulance to hospital stretchers.

As stretcher cases are brought into the reception room they should be placed as far as possible from the door to provide space for those to follow. Stretchers can be placed on trestles of such height (36 in.) as will make them serviceable as examining and dressing tables.

The ambulance used for the transportation of persons injured with persistent types of gas should be so constructed that the entire interior can be washed with a strong solution of chlorinated lime. If the patient's compartment communicates with the driver's compartment, it too must be subjected to the same treatment.

Appendix

Fabric — Bitumen Treatment of Glass.

Methods and Specifications.

The treatment is applied as follows:

1. Glass is washed as clean as possible and scoured when necessary.
2. A first coat of bituminous emulsion is applied by brush.
3. Within 10 to 15 minutes the fabric is laid on the glass and pressed into the coating.
4. After about 30 minutes a second coat of emulsion is applied, being well brushed through the meshes to bond with the first coat.
5. After not less than 24 hours a third (final) coat is applied.

The properties required in the bituminous emulsion are similar to those found in many, though not in all, materials of this type used in the building industry. It is necessary that the bond between the emulsion and the glass should not be readily destroyed by water, and this requires a restriction on the presence of free alkali as an emulsifier. The amount of filler present is also restricted. The emulsion must be sufficiently stable to be applied by brush. It must on drying give a film which provides adequate obscuration to interior lighting, which is sufficiently hard to hold the shattered glass in warm weather and which does not deteriorate on weathering. Bituminous emulsions of the type used for road work normally give a film which is too soft and lacks adequate obscuration power. The following test requirements should be met:

a) Drying time: The first coat when applied to a glass plate at a temperature of 60 to 68 degrees F. and relative humidity of 60 per cent to 70 per cent should become tacky within 15 minutes.

b) The thickness of the first coat should correspond to an application of not less than one gallon to 8 square yards. Sealing and final coats should become appreciably dry to touch within 4 hours.

c) Alkalinity: A drop of emulsion, diluted with an equal volume of distilled water, should be placed on a white glazed tile, with a glass rod. One side of this drop should then be touched with a rod dipped into a phenolphthalein solution (1 per cent in absolute alcohol). There should be no red coloration.

d) Filler content: The amount of filler present should not be greater than 12 per cent by weight of the nonaqueous part of the emulsion.

e) Softening point of dried film: The softening point (ring-and-ball method) of the bituminous material left in a dried film should not be less than 125 degrees F.

The fabric recommended for use is oznaburg (cotton) weighing not less than 3 oz. per square yard and should permit ready penetration of the emulsion. The fabric should be rot proofed by a suitable copper treatment. If the material shrinks appreciably on wetting, it should, before use, be wetted with water or diluted emulsion and applied in a damp condition.

In applying the fabric: Lay the fabric in full width down the panels, carrying it over the glazing bars and the sides of the sash and sticking it to them. Adjacent sheets should be overlapped 4 in.

While the fabric-bitumen treatment of glass in skylights and domes will usually be sufficient to hold the glass in place at the instant of explosion there will be a subsequent tendency for broken fragments gradually to become detached and fall into the building. This effect will be most serious in warm weather when fall of glass fragments may occur within a few days after fracture. To prevent this it is desirable that additional support should be given to the glass on the underside.

Supports should preferably take the form of cross bars fitted between the glazing bars. They should touch the glass and be reasonably rigid, spaced not more than two feet apart. Supports should not impose any excessive side thrust on the glazing bars.

Wired glass which is treated with fabric and bituminous emulsion will, when cracked, have a considerable measure of support from the imbedded wire mesh. With other types of glass, however, wire netting (½-in. chicken wire) should be provided beneath the whole area of glass in the dome or skylight in addition to the supporting cross bars. It will usually be convenient to fix the wire netting between the cross bars and the glass so that it is held in close contact with the glass. Special care must be taken to secure the netting at the top and bottom of each sheet of glass.

Roof glazing treated as described and supported by cross-bars and wire netting underneath, or with cross bars only in the case of wired glass, is likely to remain effective for weather exclusion and obscuration for many months after the glass is fractured.

HOSPITAL PROGRESS

A JOURNAL *of* HOSPITAL SCIENCE *and* NURSING EDUCATION

Established in 1920 as the Official Journal of the Catholic Hospital Association of the United States and Canada, ST. LOUIS, MO., U. S. A.

Published with Ecclesiastical Authorization

A Thought for 1942

The year 1942 dawns menacingly over a world in which today well one-half of the human race is engaged in works of hatred and the terrible occupation of destruction. That is a central focal thought which was no doubt present in the minds of millions of thinking persons in the last moments of 1941 and in the first moments of the new year. The thought must have been expressed in millions of different ways but each speaker and thinker could not but mean the same thing, that, unfortunately, the world is for the time being engaged in tearing down that which has been. Nevertheless, that thought, though spoken by so many tongues, is only a part of the truth. In our intentions and hopes at least, there is an ulterior purpose in this destruction, destruction is not the final purpose of it all. In the hearts of each of us, there looms the confident expectation that a better world must emerge from the ruins of the old one and the further hope that that better world which is to come will be more permanent in its structure and its operation than the world which is falling to pieces before our eyes. Otherwise surely, our outlook for 1942 would be disastrous indeed.

It has been pointed out with a frequency that might become tiring were its object not so important that destruction must lead to reconstruction and that it is through the processes of education and welfare service that the new order of things must rise out of the old. Even during this period of disruption in family life, of physical suffering, of bodily harm, of mental anguish and of poignant agony, the hospital is one of the agencies which is most influential in maintaining the confidence of the human race in its own power to envision as well as to realize a better and a happier mankind and a better and a happier home for mankind. While our major interests for the time being must be the development of those agencies through which the horrors of war must be multiplied and the sorrows of war must be extended, all in the interest of a final victory, the hospital stands as a monument of health and as the inspirer to unselfish service for the good of the individual. In no other war previous to this one, has the importance of medical care, of the hospital, of nursing service, been so keenly appreciated.

The Catholic hospital of today whispers its sweet message of reassuring confidence, of peace and happiness amidst the clamoring tortures and the wild terrors of warfare. It has the message to bring to mankind from the very depths of the agonized heart of the suffering. That message is the purpose and primary objective of the Catholic hospital, its insistence upon the meaning of it all that is found in the life and work and words of Christ Himself. Blessed are the poor, blessed are the meek, blessed are those who suffer persecution, blessed are those who suffer hunger and thirst, blessed are they that mourn, blessed are the merciful, blessed are the peacemakers, these are the reassurances for restoration to bodily, mental and spiritual health, which those who are broken in body, mind and soul find under the roof of the hospital in which there dwells with each sufferer, the suffering Christ Himself in His sacramental Reality. Today, more than ever, must that message penetrate deeply into the heart and mind of each patient. But to do so, it must have penetrated, first of all, into the mind and heart of each one who serves the patient, physician and nurse, administrator and supervisor, maid and nurse's aide.

A happy and blessed year to each of the personnel of the hospitals of the Catholic Hospital Association is today a message fraught with meaning. It cannot be an empty and perfunctory meaning; it must be a meaning that carries with it the fullness of the message of Christ Himself. May the new year be blessed in each hospital with a vast increase in opportunities for service. May it bring to the hospital a growth in responsibility to meet the growth of the need of the suffering people. May the new year be replete with that fullness of God's grace that comes to the sufferer through those that serve in self-forgetfulness and humility for the sake of Christ. In this sense, the Executive Board extends this year to all the Catholic hospitals of our two countries, its best wishes for a blessed and holy new year. — *A. M. S., SJ.*

Hospital Medical Staffs

The comprehensive statement entitled "Recommendations to All Physicians with Reference to the National Emergency" as released by the Office of the Procurement and Assignment Service, is a document of the greatest importance to our hospitals. In this statement, there have been gathered together the many provisions made by several of the governmental agencies, all dealing with the problem of the physician in the face of the national emergency. The paragraphs of special importance to the hospitals will be easily recognized. It is gratifying to note how insistent the two chief branches of the combat forces have insisted upon the importance of an internship as completing the physician's preparation for practice or for service in the Army or Navy. The hospitals are also taking special note of the fact that staff members between the ages of 20 and 45 are liable for military service It will, therefore, readily be seen that the active staffs of our hospitals may in the course of time, be composed largely of those who are beyond the selective service age and of those who for physical reasons are considered disqualified for Army or Navy service.

The functioning of the Procurement and Assignment Service will, no doubt, be felt in our hospitals within a very short time. It has already been tentatively announced that within a few weeks, all the personnel of the various committees associated with Procurement and Assignment Service may be called together for a general discussion of the administration of the Service so that all responsible persons may have a full understanding of the important work which has been allocated to this new group. The hospitals will, no doubt, be largely dependent upon this Service for the procurement of its medical personnel. Within a short time, the hospitals also will be asked to indicate their needs under various contingencies which it is expected may arise. When the time comes for an expression of judgment concerning these matters, it is hoped that all of our hospitals may so well understand their personnel needs that they will be ready to indicate these in an appropriate manner.

It should be pointed out, finally, that the Procurement and Assignment Service is attempting to carry out the one desire which has been so universally expressed throughout the period of the emergency, namely, that it is most important for ultimate victory in this war, that the needs of the civilian and of the military population should be equally provided for particularly in the matter of adequate medical care. — *A. M. S., S.J.*

Protection of Hospitals

The article printed in this issue dealing with "Protection of Hospitals," which has been authorized to be printed by Dr. George Baehr, Director of the Medical Division of the Office of Civilian Defense, is called to the special attention of our readers. This comprehensive document which is shortly to be issued in separate form by the Government Printing Office, forms a most valuable contribution to the literature of the present war. It calls to the attention of the hospital administrator, many functions which might be regarded as belonging to her routine activities but which in a time such as the present, assume a new and an additional importance.

It is unnecessary to point out that the suggestions contained in the article are the outgrowth of extensive study. The Office of Civilian Defense is to be congratulated upon the compilation of so important and valuable a document. It seems equally unnecessary to emphasize the fact that no one hospital can put into practice all of the suggestions contained in this article. Each hospital with such practical wisdom as it can command, will carry out those of the suggestions which seem particularly applicable to each institution's circumstances of time, place, personnel, physical construction and equipment. The site of the hospital and the degree of exposure to possible dangers must, of course, be considered dominant factors in determining the extent to which precautionary measures must be adopted. In reaching a decision upon so vital a problem, each hospital will seek competent advice and will be guided in its final decision by those in whose hands rest the responsibility for the safety of our citizens in each locality.

The important conclusion which each hospital administrator will reach after the perusal of this valuable contribution is that each administrator must know his or her hospital thoroughly and must adopt precautionary measures in accordance with the special physical characteristics of each institution. At a time such as this, ignorance about one's own institution and about details of structure and equipment might prove to be very costly in the loss of human life and human safety. — *A. M. S., S.J.*

Under the patronage and by the invitation of His Excellency, The Most Reverend Samuel A. Stritch, D.D., Archbishop of Chicago, the Officers and Executive Board of the Catholic Hospital Association of the United States and Canada announce that the Twenty-seventh Annual Convention of the Association will be held at the Stevens Hotel, Chicago, Illinois, June 15th to 19th, 1942.

Curity announces
INSULTOIC* MEMBRANE
for the prevention of adhesions

●Insultoic Membrane is a chromicized absorbable insulating sheet, processed from bovine allantois. It comes sterilized and tubed, ready for use. Confirming the original report of H. L. Johnson, animal experiment and varied clinical experience during the past 5 years suggest its value as an insulating patch over denuded structures to prevent the formation of crippling adhesions. Particular success is reported when the Insultoic Membrane is used in Arthroplasties, Neurosurgery, Tendon and Nerve repair and Fallopian Tube reconstruction.

Further information is contained in the four reports listed below—reprints of the first three furnished on request. Correspondence is invited on the use of Insultoic Membrane.

The Curity Suture Laboratories have been gratified at this opportunity to collaborate with surgical research investigators in the development of Insultoic Membrane, a notable aid to optimum surgical end results.

REFERENCES

Johnson, H. L., "Insulating Patches and Absorbable Sutures Made from Fetal Membranes." New England Journal of Medicine, Vol. 216, No. 22, pp. 978-982, June 3, 1937.

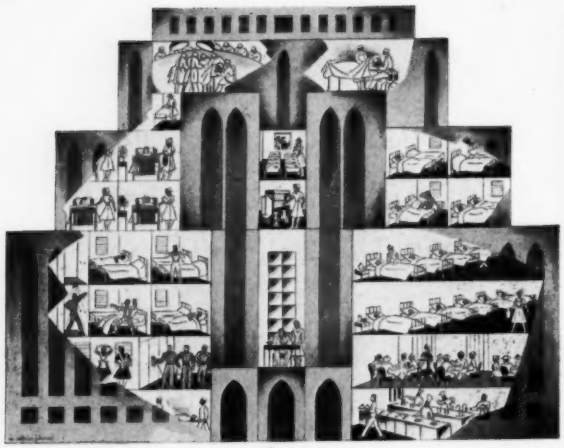
Davis, L. and Aries, L. J., "An Experimental Study Upon the Prevention of Adhesions About Repaired Nerves and Tendons." Surgery, Vol. 2, No. 6, pp. 877-888, December, 1937.

Gepfert, J. R., "Studies on the Reconstruction of the Fallopian Tube." American Journal of Obstetrics and Gynecology, Vol. 38, No. 2, pp. 256-264, August, 1939.

Penfield, W., Wilder and Humphreys, Storer and Chao, Yi-Cheng, "A New Method of Preventing Adhesions." British Medical Journal, pp. 517-558, March 30, 1940.

*Trade Mark Reg. U. S. Pat. Off., U. S. Pat. No. 2,135,399

LEWIS MANUFACTURING CO • BAUER & BLACK • *Divisions of The Kendall Company* • *Chicago*



From Top to Bottom

We can supply you with uniforms and hospital apparel for every hospital use. The following list proves it.

Aprons	Patients' Gowns
Chefs' Aprons	Visitors' Gowns
Maids' Aprons	Pneumonia Jackets
Surgeons' Aprons	Pulover Jackets
Waitresses' Aprons	Surgical Leggings
Clothes Bags	Masks
Laundry Bags	Pajamas
Head Bands	Bath Robes
Bibs	Dresser Scarfs
Abdominal Binders	Sheets
Breast Binders	Gynecological Sheets
Female T Binders	Oilproof Sheeting
Male T Binders	Rubber Sheeting
Scultetus Binders	Internes' Shirts
Straight Binders	Childrens' Sleepers
Surgical Binders	Slips
Caps	Smocks
Operating Caps	Bed Socks
Capes	Ether Socks
Pillow Cases	Bed Spreads
Collars	Stockinette
Bed Pan Covers	Chefs' Suits
Hot Water Bottle Covers	Doctors' Surgical Suits
Ice Bag Covers	Internes' Suits
Mattress Covers	Orderlies' Suits
Cuffs	Porters' Suits
Childrens' Gowns	Superintendents' Suits
Doctors' Surgical Gowns	Women Internes' Suits
Nurses' Surgical Gowns	Maids' Uniforms
Nurses' Gowns	Waitresses' Uniforms

For greater economy many hospitals have standardized on Marvin-Neitzel apparel. It wears longer.

MARVIN NEITZEL
SINCE 1845
CORPORATION
TROY NEW YORK

HOSPITAL ACTIVITIES

NATIONAL COUNCIL OF CATHOLIC NURSES TO MEET AT DETROIT

The executive committee announced that the first biennial convention of the National Council of Catholic Nurses will be held at Detroit May 25, 26, and 27, and that the Hotel Statler will be the headquarters for the sessions.

The program of the 1942 convention will be designed to hold special benefits for both the diocesan unit and the individual member. One part of the program will deal with organization, membership, programs, and other matters, from the point of view of the diocesan group, and the other part of the program will be concerned with the problems of the individual Catholic nurse.

District of Columbia

Need Public Health Nursing Consultants. Under the stress of rapid population growth connected with the establishment of industrial plants and work in national defense areas, the usual public health safeguards are inadequate. In connection with the Government's program for organizing public health nursing and health education to meet present needs, the Civil Service Commission, Washington, has announced an examination for two grades of public health nursing consultant. Announcements giving full information, together with application forms, may be obtained from the Secretary, Board of U. S. Civil Service Examiners, at any first- or second-class post office, or by writing to the U. S. Civil Service Commission, Washington, D. C.

Florida

Non-Catholic Gives Tabernacle. A tabernacle has been provided for the station hospital at Camp Blanding by W. J. Cunningham, a non-Catholic, as a benefaction for the Rev. P. J. Quinn, hospital chaplain, formerly of Vicksburg, Miss.

Illinois

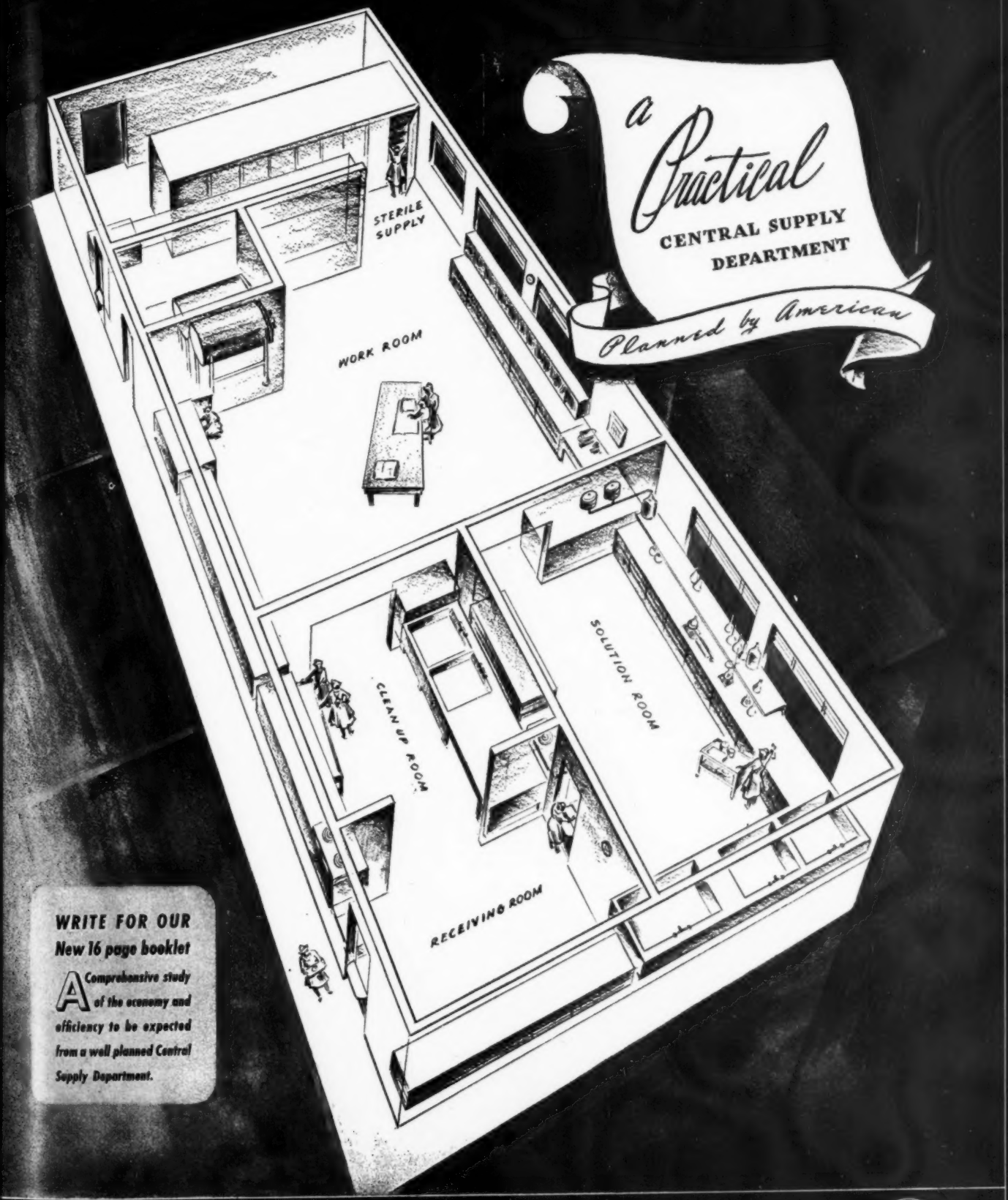
Institute Post Graduate Course. The St. Joseph's Hospital School of Nursing, Joliet, offers a four months' post-graduate course in theory and practice of obstetrics. Approval has been granted by the Department of Registration and Education, Springfield. The postgraduate course is open to Sisters as well as to lay students, and will include obstetrical field experience with the local Visiting Nurses' Association. Classes begin on the 15th day of January, May, and September.

To Aid Civilian Defense. Mercy Hospital, Chicago, has opened its doors to aid civilian defense. It is the first private hospital in Chicago to offer its services as a training ground for volunteer nurses' aids. All training is under the supervision of registered nurses.

Priest Always on Duty. The Catholic poor at Cook County Hospital, Chicago, are never without the attention of the Church. Day and night a priest is on duty at the County Hospital. No priest leaves until another arrives. The veteran at the world's largest hospital is Rev. Francis Bimanski, S.J.

Father Bimanski is known as the "little priest who speaks so many languages." He has given 26 years to consoling the sick at the hospital. Assisting Father Bimanski in his work are three other Jesuits, Fathers Andrew Cook, Edward Jones, and Paul Kovalcik.

(Continued on page 20A)



WRITE FOR OUR
New 16 page booklet

A Comprehensive study of the economy and efficiency to be expected from a well planned Central Supply Department.

AMERICAN STERILIZER COMPANY

ERIE, PENNSYLVANIA

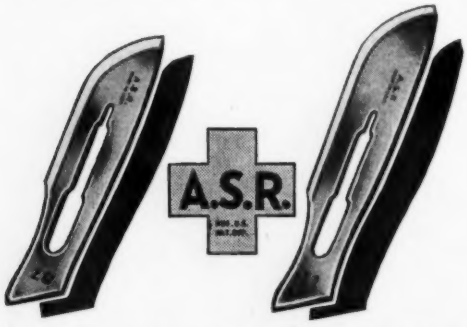
SALES OFFICES in New York, Chicago, Philadelphia, Boston, St. Louis, Pittsburgh, Los Angeles, San Francisco, Cincinnati, Atlanta, Dallas, Richmond
AGENCIES in Principal Cities in the United States • Represented in Canada by Messrs. Ingram & Bell, Ltd., Toronto, Montreal, Winnipeg, Calgary

"THESE BLADES HAVE MY FULL CONFIDENCE!"

Day in, day out, A. S. R. Surgeon's Blades deliver performance that builds confidence. That's because these famous precision-made blades are *uniform*. Our new and exclusive inspection methods leave nothing to chance —no inferior blades reach the surgery— each and every edge has the *one* correct degree of keenness. With the New Year, check the surgeon's blades *you* use against A. S. R. Blade's strict specifications. Your regular supplier will give you full details.

Available in 9 sizes to fit all standard surgical handles.

SURGEON'S DIVISION, A. S. R. CORP.
315 Jay Street Brooklyn, N. Y.



A. S. R. SURGEON'S BLADES
and Handles

HOSPITAL ACTIVITIES

(Continued from page 18A)

Hold Mother Cabrini Services. An invitation to all was extended by the Missionary Sisters of the Sacred Heart of Jesus to attend Mass on December 22 in Columbus Hospital chapel, Chicago, Solemn Pontifical Benediction of the Most Blessed Sacrament was also given. The services were in honor of the third anniversary of the beatification of Blessed Mother Cabrini in St. Peter's at Rome, at which ceremonies the late George Cardinal Mundelein was celebrant of a Solemn Pontifical Mass in St. Peter's. He also officiated at the beatification ceremony in the afternoon in the presence of Pope Pius XI, and delivered a radio address from Rome to the United States.

Nurses Join Eucharistic Procession. Student nurses from St. Francis Hospital in Evanston marched in the Eucharistic procession at Notre Dame Church, Chicago, as Cisca held its regular trimestrial Holy Hour.

Indiana

Install New X-Ray Equipment. X-ray equipment of the most modern type has been installed in the remodeled and enlarged X-ray department of St. Joseph's Hospital in Fort Wayne. The new apparatus will provide extensive facilities for radiographic and fluoroscopic diagnosis of a wide variety of human ailments and for the treatment of many conditions which can be benefited by radiation therapy. The purchase of this equipment, requiring an outlay of more than $28,000, was made possible through a share in the estate of the late James Hamilton.

According to hospital officials, the new equipment is the last word in scientific development. Upon entering the department the fear of electrical shock may be dismissed, for every piece of the new apparatus installed is shockproof. Where formerly the hospital used only one diagnostic X-ray generator, now there are two — both of the highest power yet designed. The two X-ray rooms for radiography and fluoroscopy are, therefore, operable independently, each with its own power source.

The safety feature of the new therapy equipment, which operates at 250,000 volts, is achieved by immersion in oil of the entire high-voltage system, including the X-ray tube, in an hermetically sealed grounded metal tank known as the "tube head."

In spite of its size and power the unit has a high degree of flexibility enabling the operator to adjust it to the proper position for correct treatment of any part of the body. A set of lead-lined cones enables the confinement of X-radiation to the comparatively small area under treatment. The treatment room in which the machine itself is installed is lined with lead to confine all X-rays to that room.

Sister M. Geraldine, who is in charge of the department, explains that control of the unit is centered in a streamlined panel mounted outside the treatment room, but adjacent to a lead-glass window through which the operator has the patient under constant observation during treatment.

In conjunction with each piece of generating equipment is an X-ray table of advanced design which facilitates the making of X-ray films while holding the patient at any angle from vertical through horizontal to several degrees head down.

A competent radiologist will have the immediate supervision of the operation of the new X-ray apparatus.

Kansas

Dinner Served to Staff. On the evening of December 16, the doctors of the staff of St. Mary's Hospital in Emporia and their wives were served to a 6:30 o'clock dinner in the hospital. The dinner hall was beautifully decorated in the

(Continued on page 22A)

"I like *everything* about this hospital, Jim"

"I never realized how wonderful a hospital could be. They do everything to keep a patient happy—it's always so quiet and restful. Why, when I dozed off before lunch, I didn't even hear them wheel in that table."

CHOOSE CASTERS WITH CARE

Casters are a small detail, true enough. But a mighty important detail—because Casters mean so much to smooth-running operation on which any hospital's reputation depends.

That's why modern hospital management favors Bassick Casters. They are engineered for longer, quieter performance . . . on beds, chairs, furniture, trucks and all types of hospital equipment. When making replacements or ordering new equipment, remember hospitals run smoothly on Bassicks.

HOSPITALS RUN SMOOTHLY ON

Bassick Casters

BRIDGEPORT—CONNECTICUT

Another Product of STEWART WARNER

THE WORLD'S LARGEST MANUFACTURER OF CASTERS

The Baby-San Dispenser holds one pint. Conserves soap supply. Portable — easily sterilized. Furnished free to quantity users of Baby-San

APPROVED
. . . Unanimously

PARENTS . . . nurse, supervisor . . . doctor—all exhibit satisfaction at Baby-San results. Yes, even the baby, if it were able, would say, "Thank you for Baby-San."

Quiet and contented after the Baby-San bath, the newborn baby sleeps soundly, because the rich lather has a *soothing* effect on sensitive skins. This purest liquid castile soap cleanses quickly and leaves a safety *film of olive oil* to prevent dryness and irritation. Small wonder parents and doctors approve Baby-San.

Nurses prefer Baby-San because it provides a complete bath. No other oils or greases are ever needed. To the supervisor, Baby-San means simplified bathing routine, saving of nurses' time, lower bathing costs.

Today, you find Baby-San in 65% of the nation's nurseries—approved by all as the finest baby soap made.

The HUNTINGTON LABORATORIES Inc.
DENVER HUNTINGTON, INDIANA TORONTO

BABY-SAN
AMERICA'S FAVORITE BABY SOAP

HOSPITAL ACTIVITIES

(Continued from page 20A)

spirit of Christmas and patriotism. Music was furnished by a violinist quartette from a local junior high school. After dinner, the ladies played bridge in the solarium, while the doctors held their staff meeting.

Maryland

Nurses Urged to Aid National Effort. A ringing call to Catholic nurses throughout the United States "to recognize and fulfill their patriotic duty, to the end that our country may achieve is ultimate victory," was sounded in a resolution adopted by the Executive Committee of the National Council of Catholic Nurses which met at Mercy Hospital in Baltimore in December.

The committee also approved the preparation of a handbook for the Council, and indorsed the planned publication every two months of a Council newsletter.

The resolution adopted by the executive committee of the N.C.C.N. noted that "there are nurses now holding positions essential to the civilian defense"; that "there are nurses at present professionally inactive who could render great service by re-entering the nursing field"; that "there are nurses eligible and capable of service to the armed forces," and called upon all diocesan affiliated groups "to use every possible means to urge its members to recognize and fulfill their patriotic duty, to the end that our country may achieve its ultimate victory."

Michigan

New Wing Nearing Completion. The new wing of Mt. Carmel Mercy Hospital in Detroit is nearing completion. It will furnish an additional 200 beds, giving the hospital a capacity of about 600 beds.

Minnesota

Sodalist Reception. On December 8, the Feast of the Immaculate Conception, 17 student nurses of St. Mary's Hospital School of Nursing in Minneapolis were received into the Sodality of the Blessed Virgin. The ceremony closed with Benediction of the Blessed Sacrament and a brief talk on the virtues of Mary.

Annual Spiritual Retreat. St. Mary's Hospital School of Nursing, Minneapolis, held its annual three-day retreat for the nurses December 12–15. Rev. Paul Waldron, of St. Columbans, Neb., conducted the exercises and imparted the Papal Benediction at the close of the retreat.

At ceremonies held on December 8, 17 student nurses were admitted to the Sodality of the Blessed Virgin.

Students' Christmas Party. At the student's Christmas party, December 23, at St. Mary's Hospital in Minneapolis, the St. Mary's orchestra added greatly to the joy and festivity. Under the direction of Mr. Robert Campbell of the McPhail School of Music, several Christmas selections, as well as others, were nicely rendered. Mr. Campbell, accompanied by his wife, also of the McPhail School, sang several Christmas carols.

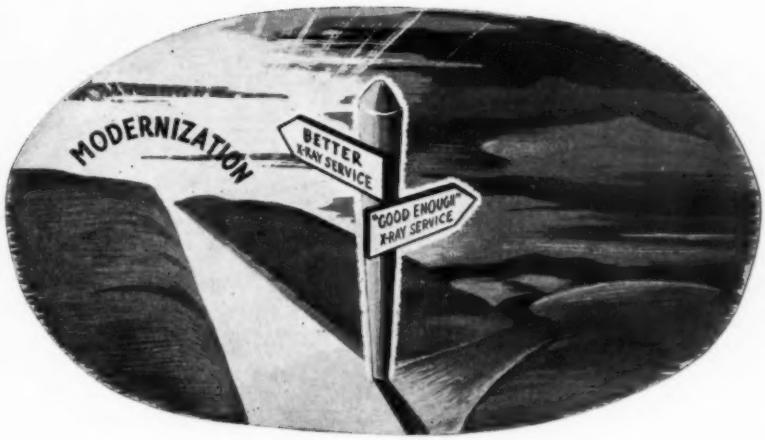
Montana

71st Year of Service. On November 1st of this year, St. John's Hospital in Helena, founded through the efforts of Father DeSmet, marked its 71st year of service.

In 1869, Father DeSmet met Bishop Miege in St. Louis, and reminded him that he promised to send Sisters to Montana to found a hospital. The bishop willingly granted the request, and sent five Sisters and one lay woman to Helena to begin the work.

(Continued on page 25A)

There's a Definite Trend • • •



Toward Better Hospital X-Ray Service

● **Verily, more and more hospitals, everywhere, are modernizing their x-ray facilities, to afford patients the benefits of the better, more efficient service which notable developments in equipment have made possible.**

With the continuous advancement of medical science, the ultimate obsolescence of equipment is inevitable. One can perhaps "make it do" for a while—procrastinate it's relegation—provided an otherwise better service which patients must unwittingly forego does not eventually reflect unfavorably on the hospital's prestige.

"Does the service of our x-ray department measure up to present day standards?" is an oft propounded question which leads hospitals to this realization: that radiographs are now being produced the diagnostic value of which is unattainable with the finest x-ray apparatus of a relatively few years ago. To "stop" involuntary motion of vital organs by "snapshot" radiography, with resulting films yet rich in contrast and detail — to reveal more diagnostic information than ever before—requires not only an adequately-powered x-ray generator but also x-ray tubes designed to successfully withstand this energy over a *small focal-spot area.* There is no other means or method of arriving at these superior results.

Likewise, the remarkable advances in the science of high-voltage x-ray therapy are a constant challenge to hospitals admitting patients for tumor therapy—that they adequately provide for such treatment with modern equipment specifically designed to meet the exacting requirements of the approved newer technics. Facility of treatment, electrical safety, and utmost accuracy of x-ray dosage are among the criterions of a hospital's x-ray therapy service.

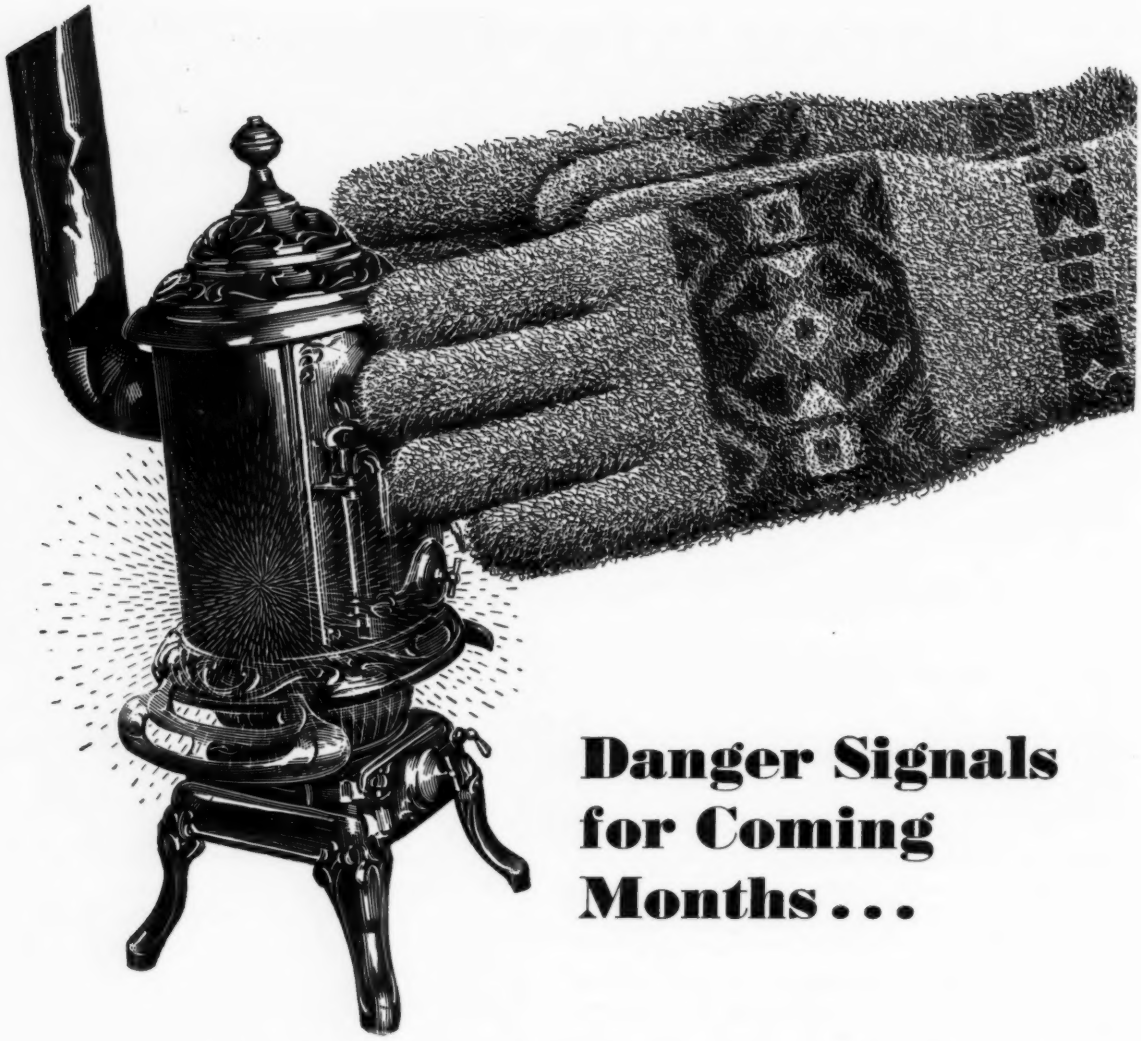
To hospital administrators and staff members who desire a fresh perspective of their institution's present x-ray facilities, in light of prevailing standards in modern hospital practice, we submit this suggestion: That you arrange to have one of our field technical experts call at your convenience, to give you the benefit of his knowledge and experience in a survey of this kind. You can rely on him to intelligently interpret your requirements, to offer you practical, helpful suggestions for the most satisfactory and economical solution of your particular problems. His recommendations, you may rest assured, will be based strictly on your actual and immediate needs.

A corps of expert layout engineers will collaborate in such a survey, by way of drawing up detailed floor plans with complete specifications to supplement the suggestions and recommendations as submitted.

Your inquiry will have most careful attention. Address Dept. K31.

GENERAL ELECTRIC X-RAY CORPORATION

2012 JACKSON BLVD. CHICAGO, ILL., U. S. A.



Danger Signals for Coming Months . . .

Cold weather, especially the invigorating and deceptively "healthy" cold, dry, sunny weather of midwinter, gives warning of the approaching seasonal increase of colds, sore throats, and other infections of the upper respiratory tract.

Changes in humidity, unequal cooling or warming of the body due to improper clothing, over-heated rooms, drafts and other uncontrollable factors hamper natural defense mechanisms.

Under circumstances such as these, it is advisable to aid the natural defenses. For this purpose 'S. T. 37' Antiseptic Solution, an efficient, clinically non-toxic preparation, may be applied regularly with a swab or atomizer to the mucous membrane of the nose and throat.

• • •

'S. T. 37' Antiseptic Solution is highly bactericidal and exerts a soothing, local analgesic effect on inflamed mucous membranes. The low surface tension of this preparation enhances its bactericidal power by facilitating penetration of minute tissue spaces.

Moreover, 'S. T. 37' Antiseptic Solution is oil-free and may therefore be administered to patients of all ages without fear of producing lipid pneumonia. Supplied in bottles of five and twelve fluidounces.

Sharp & Dohme's

'S. T. 37' ANTISEPTIC SOLUTION

HOSPITAL ACTIVITIES

(Continued from page 22A)

Eight days were required to make the trip, by rail and coach. When the Sisters arrived in Helena there was no residence for them. They stayed for a short time at the homes of friends, until some of the local priests and a Brother moved into the sacristy, so the Sisters could have their home. When St. Vincent's Academy was ready for occupancy, in December, 1870, the Sisters moved to the new quarters, and the Fathers returned to their former home.

After the initial struggles of securing land and finances to begin the work were over, a one-and-a-half story cottage was secured and considered adequate to serve as the first St. John's Hospital. This was in November, 1870. In 1872, the hospital was enlarged to twice its former capacity. The Sisters cared for the indigent sick of Lewis and Clark County from 1871 to 1880 and for those of Meagher and Jefferson Counties from 1872 to 1886. Besides these public charges they had also in their keeping the mentally deranged from the entire territory. At first the numbers were few, but soon a separate building had to be provided for them. This was the first mental institution in Montana and it remained an adjunct of St. John's until 1877, when the state hospital at Warm Springs was built. The former mental patient's quarters were then remodeled and fitted out for the care of orphans, and in 1880 St. Jerome's Orphan Home was opened. The orphanage remained an annex of St. John's Hospital until 1892, when it was transferred to a more eligible site and became a separate establishment.

When the Northern Pacific railroad was built into Helena, the hospital became inadequate to take care of the influx of population. The building had to be replaced by a larger structure of brick and stone, the cornerstone of which was laid in June of 1884. In the early 1900's a donation of money to the community made possible the creation of a two-story building, the first floor of which was used for a laundry and power plant and the second floor of which provided a contagious-disease department and classroom for nurses. At this time, too, tunnels were built from the hospital to the new power plant and to the nurses' home.

For 35 years after its remodeling, the facilities of St. John's served the community admirably, but in 1935 the building was damaged by earthquakes. The hospital then became quartered in the building of the Montana Children's home and hospital. This home required considerable remodeling, costing $30,000, the money being secured from the federal emergency earthquake relief funds.

After the quakes, a group of Helena residents gathered and formed the St. John's Hospital Association, and pledged themselves to help the Sisters finance the building of a new hospital. While only one eighth of the total cost of the building was raised through popular subscription, the Sisters, nevertheless, felt grateful for even this fraction. The remainder of the obligation was assumed by the mother house at Leavenworth, Kans.

In November, 1937, a city-wide women's meeting was held, and St. John's Hospital Guild was organized to assist the Sisters in securing a new building and in continuing their work in the present building. During the four years of the guild's existence, it had purchased $5,000 worth of equipment for the hospital.

On June 24, 1939, the historic cornerstone of St. John's Hospital was placed in the new building. The new St. John's Hospital is 156 ft. long and 43 ft. wide. A wing 43 ft. wide extends 60 ft. from the center of the building. The hospital consists of a full basement and four stories. It is resistant to earthquakes. All of the walls and floors are of concrete, heavily reinforced with steel. In the basement are a modern

(Continued on page 26A)

The AMERICAN RESPIRATOR

Modern, streamlined design —convenient, comfortable

★ *The hinged cylinder opens the entire length of the bed, making it easy to install patient and keep cylinder clean. Quiet and vibrationless in operation. "Engineered" construction; motor and bellows are out of sight, yet easily accessible. Hand lever for emergency operation.*

POSITIVE, AND RAPID AGGLUTINATION!

Unmistakable Results

★*Careful selection of only* highest titred *donors insures the* unfailing accuracy *of American standardized Human Blood Serum, and results in an exceptionally high titre, clear and clean serum, with no false agglutination reactions.* SET: *2cc each Type A, Type B (50-60 tests) $4.00. Vial: 2cc Type O, Moss IV, for confirming (50-60 tests) $2.00. 5cc sizes also available.*

AMERICAN HOSPITAL SUPPLY CORP.
CHICAGO NEW YORK

Throw Away Your Plaster Shears!

Remove MAJOR Plaster Bandage with Hot Water

★ When you use Major Plaster Bandages, you say goodbye to difficult cast removal. You and your patients alike will be pleased with these strong, light-weight casts, easily bivalved or removed without hard work on your part or pain to the patient. Major Bandages are put on with cold water, removed with hot water, by your choice of two methods. Immersing or sponging the cast with hot water allows you to unwrap it as you would any bandage. Or, the cast may be bivalved by scoring it as it sets, then removing it as shown in the illustrations at the right. Order a trial supply today . . . . . your satisfaction is guaranteed. Packed one dozen in a tin, priced as follows:

2″ x 3 yards, dozen.....$1.55 4″ x 5 yards, dozen.....$2.50
3″ x 3 yards, dozen..... 1.90 5″ x 5 yards, dozen..... 3.00
6″ x 5 yards, dozen.....$3.40

Hot water from a syringe, applied along a scored line, makes bivalving of Major casts an easy matter. Patients like this method.

The plaster is disintegrated by the water, the crinoline cut with bandage shears. Leaves a neater edge, no plaster lost in removal.

A. S. ALOE COMPANY
1831 OLIVE STREET • ST. LOUIS, MISSOURI

HOSPITAL ACTIVITIES

(Continued from page 25A)

kitchen, several dining rooms, and large storerooms. On the first floor, are the executive offices, the children's department, X-ray equipment and laboratories, a lobby and reception room, doctors' and nurses' restrooms, and a library. The second floor is reserved for medical cases. The Sisters' quarters are in the east wing of the second floor. The third floor is for surgical cases, while on the fourth floor are provided operating and delivery rooms as well as facilities for maternity care. Each floor has a beautiful sun porch.

The hospital has a beautiful chapel in the east wing on the first floor. The altar, statues, pews, and stained glass windows from St. Vincent's Academy were used in it. The altar railing for the chapel was donated by the Daughters of Isabella, and the sanctuary lamp was also a donation.

With five four-bed wards, seven double rooms, 26 private rooms without bath, and 12 private rooms with bath, and in addition 12 beds for children, the hospital can care for 84 patients. For the care of infants, 20 bassinets have been provided. In emergencies, however, ample space is available for additional beds.

More than 45,000 patients, or an annual average number

(Continued on page 28A)

ST. JOSEPH'S HOTEL DIEU HOSPITAL, POLSON, MONTANA.

America's *health army is mobilized!*

INTO THE SPOTLIGHT today comes the work of nearly two million people engaged directly or indirectly in caring for the sick and preventing disease. For America now realizes that as vital as arms and munitions to the nation's defense is the *health of its people.*

Behind those of America's Health Army actually serving with the armed forces, the effort of every nurse and physician in the interest of public health is a direct contribution to the strength of America.

To you of the medical profession is entrusted the great responsibility of maintaining the nation's health in this emergency . . . and to the medical supply and equipment manufacturers, the task of maintaining the quality and quantity of essential pharmaceuticals, apparatus and supplies.

Mindful of its part in this responsibility, Patterson has taken steps to insure the availability of both fluoroscopic and intensifying screens. An ample supply of raw materials is in hand. Research and testing facilities have been expanded. More than adequate production is being maintained. The roentgenologist may rest assured that Patterson screens will continue to give that degree of extra performance that has made them the world's standard of quality.

THE PATTERSON SCREEN CO.
TOWANDA, PA., U. S. A.

PATTERSON'S facilities devoted 100% to Public Health and Defense of the Democracies

Patterson X-Ray Screens

YOU'LL BE GLAD YOU GOT YOURS

SURGEONS and hospital superintendents alike are enthusiastic about these new, improved Septisol Dispensers. They like the ease of operation... the amazing soap economy. It's the best dispenser Vestal has ever created--and that means the best there is--by far.

THE NEW IMPROVED SEPTISOL DISPENSERS are furnished in three models—Double Portable, Single Portable and Wall Type. Beautiful chromium plated finish. Wall type has attractive plastic base. The modernly styled base demanded by Modern Hospitals.

The New Improved SEPTISOL DISPENSERS

1 Control Valve. This simple regulating device controls the flow of soap, ranging from a few drops to a full ounce. This exclusive feature eliminates waste.

2 Combination spout swivel device and filler plug permits spout to swing from left to right. Removable to permit easy filling.

3 Horizontal Dispensing spout cuts down overall height—eliminates dripping.

4 New Foot Operated Feather Touch Pedal. No springs. No washers. No moving parts—nothing to wear out. You'll like this.

SEPTISOL SURGICAL SOAP

is scientifically prepared from pure Olive Oil, Cochin Cocoanut Oil, and other fine vegetable oils. Made especially for scrub-up rooms. Gives a thick, creamy lather. Helps eliminate danger of infection and roughness that comes from use of harsh, irritating soaps.

VESTAL CHEMICAL LABORATORIES, INC.

ST. LOUIS NEW YORK

HOSPITAL ACTIVITIES

(Continued from page 26A)

of about 650, have been cared for at St. John's Hospital since 1870.

New York

Continue to Send Medical Mission Supplies. The Catholic Medical Mission Board, New York City, shipped 57 cases of medical supplies to missions in Africa and Jamaica, B.W.I., on the day when Germany and Italy declared war on the United States. This is one of the largest and most valuable consignments ever sent out to the missions in one day. Of the 57 cases, 31 were sent to mission stations in British East Africa. Sixteen of the cases were forwarded to mission stations in Jamaica. Almost all of the supplies were paid for by contributions made expressly for the benefit of the missions to which they were sent. The office work and the shipping of the supplies is carried on as one of the major activities of the Daughters of Mary, Help of the Sick.

Asked to Support Drive. A direct appeal campaign among all New Yorkers to raise $750,000 for the completion of the modernization of St. Vincent's Hospital, New York City, was announced by Archbishop Francis J. Spellman. The drive opened January 5, and is being conducted so that 92-year-old St. Vincent's may deal adequately with requirements of the wartime emergency.

First-Aid Courses for Nuns. Special first-aid courses for all members of the Catholic Sisterhoods in hospital work in the Archdiocese of New York will be offered by the Catholic hospitals affiliated with New York Catholic Charities.

Addressing the 80 Sisters representing 16 religious communities attending a meeting recently, Archbishop Spellman declared: "We shall defend to the very limit of our lives and resources this our government. The health resources and agencies and facilities of this archdiocese and the Catholic Church all over our country, unqualifiedly, and in every way, will be given to the support of those charged with the duty of organizing our country in this situation."

The meeting adopted the following resolution: "Following the example of the Archbishop and the traditions of our religious communities, we pledge our wholehearted cooperation and support to the American government in the fight to preserve the liberties of the American people. To this end we will spare no effort in the present national crisis."

Lay Cornerstone of New Chapel. On the grounds of St. Charles' Hospital and Home at Port Jefferson, L. I., there is being built a beautiful new chapel to be called St. Theresa of Avila, in honor of Mother Theresa.

The new chapel is of ecclesiastical design of architecture and of brick and stone construction. It will have a seating capacity of 680, and will serve not only the residents and the Community of Sisters, the Daughters of Wisdom, but also is adjacent to the therapy room. It is expected that dedication ceremonies will be held in the spring.

Nursing Brothers Needed. Young men from 17 to 37 years of age are eligible to apply for acceptance to the religious life in the Brothers of Mercy, whose first United States foundation was made in 1924, for the care of the sick and other charitable works for the relief of spiritual and physical misery.

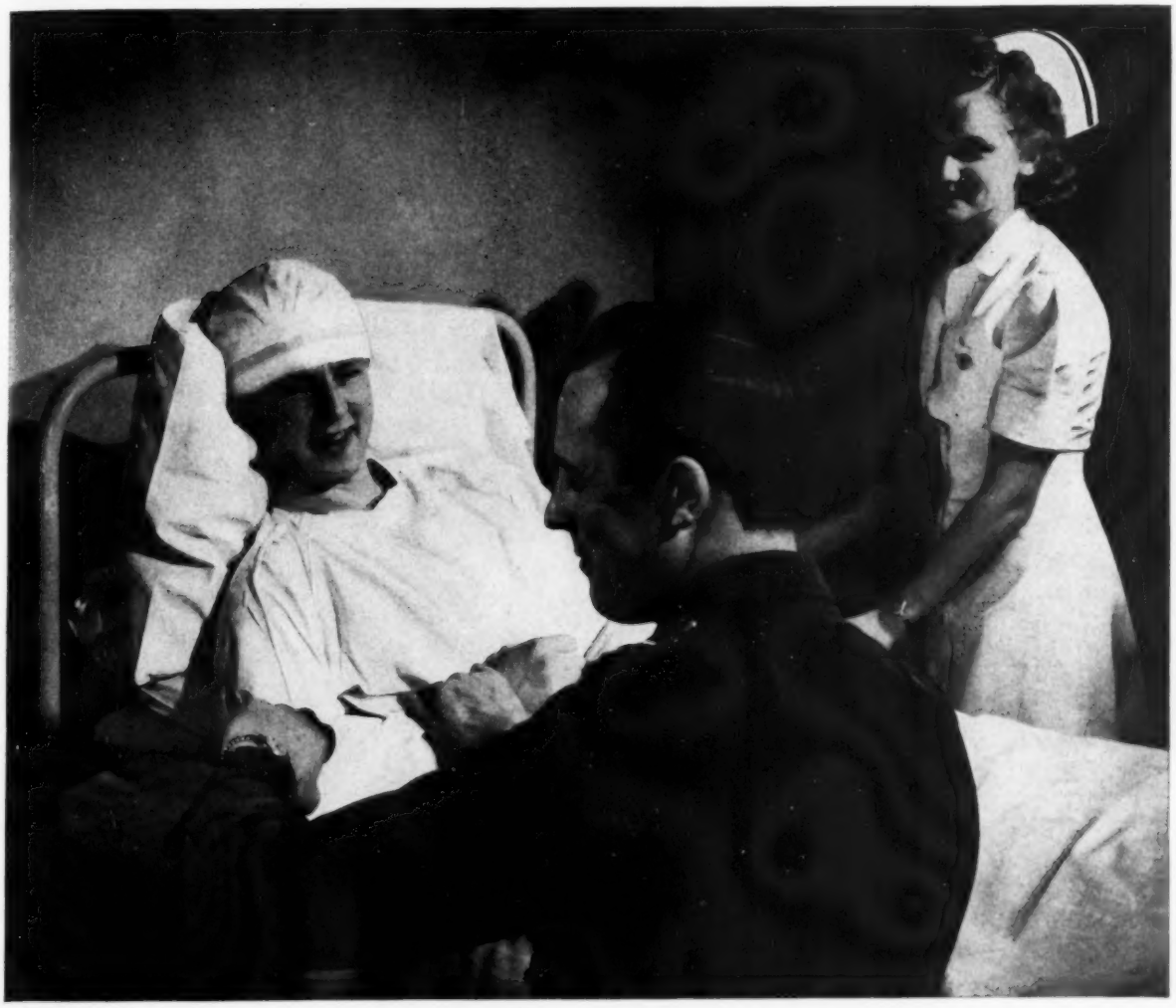
In 1926 the Brothers erected a novitiate at Buffalo, where preparation is made for the work of nursing and instruction is taken in the Red Cross Society.

Further information regarding the Rule, the Religious Community, and the care of the sick may be had by application to the Rev. Brother Novicemaster, 49 Cottage St., Buffalo, N. Y.

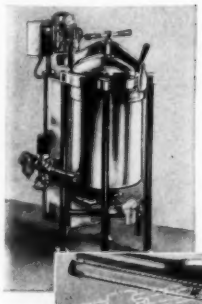
Pennsylvania

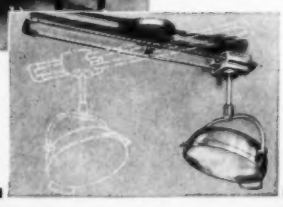
Conduct Triduum. A triduum for the nurses of Pittsburgh Hospital was held December 11 to 14.

(Continued on page 30A)



"Thanks, Doc"





Castle Pressure Instrument Washer-Sterilizer cleans, sterilizes and dries instruments in one positive process.
Castle No. 12 Operating Light projects light at any angle from any point in a complete 7 foot circle.

Under regulations he would say "Doctor" or "Sir"—but in recuperating, a grateful heart says, "Thanks, Doc!" He is still a bit groggy but well enough to appreciate the good care he receives in the Service Hospital.

Whether you realize it or not, Mr. Hospital Executive, you are in good part responsible. You have limited your general buying to essentials—you understand and accept the inevitable delay in delivery of equipment such as Castle Lights and Sterilizers.

In the better years to come this boy, and more like him, will be ever grateful to you for the care and attention he now receives. He will thank God he comes from a homeland where Hospitals and Manufacturers have without question or quibble given the Government their all so that he may have the best that ingenuity and sacrifice can provide. *So, thank you, Mr. Hospital Executive!*

WILMOT CASTLE COMPANY
1177 UNIVERSITY AVENUE ROCHESTER, N. Y.

CASTLE STERILIZERS AND LIGHTS

AUTO-SEQUENCE

LOCATES ALL DOCTORS

WITHOUT DELAY or NOISE! Don't put up with the inconvenience of an out of date paging system. Get *immediate response* to your calls with the new

HOLTZER-CABOT AUTO-SEQUENCE VISUAL PAGING SYSTEM

This modern, efficient system enables you to:

1. Page 6 doctors at one time in rapid succession.

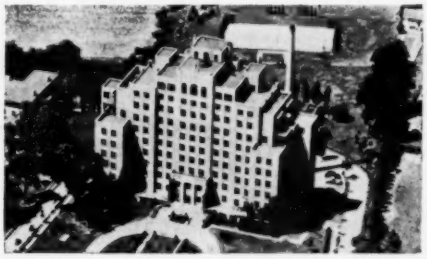
2. Sound an audible signal in an emergency.

3. Page 120 different doctors on the average low-cost system.

4. Make a call with absolutely no operating noise.

Hospital superintendents agree that HOLTZER-CABOT Auto-Sequence is an outstanding visual paging system. Expert engineering and many years of experience in signaling systems are your assurance of long trouble-free performance.

Write for full information



Fitzgerald-Mercy Hospital, Darby, Pa. Equipped with Holtzer-Cabot Visual Paging System and other Systems. Photo Courtesy of Dallin Aerial Survey, Philadelphia.

THE HOLTZER-CABOT ELECTRIC CO., 125 Amory Street, Boston, Mass.

Branches in Principal Cities

HOSPITAL ACTIVITIES

(Continued from page 28A)

Marks 50th Year. Quiet ceremonies marked the completion of 50 years of service of the Roselia Foundling and Maternity Hospital, Pittsburgh. A high Mass of thanksgiving was celebrated in St. Mary's of Mercy Church, and a luncheon was held at the William Penn Hotel. About 150 guests, friends and benefactors of the hospital, attended.

The hospital, opened as a foundling asylum, was first established in an old home near the site of the present Hotel Schenley, in 1891. About four months later, at Thanksgiving, it was moved to its present location. During the half century of service, the hospital has cared for 15,920 children and 10,285 mothers. It now has a staff of 22 doctors, a resident physician, a rotating intern from Mercy Hospital, and a senior student from the University of Pittsburgh. There are 23 Sisters of Charity and 25 student nurses in residence. The nurses are specializing in an 18-month course in pediatrics and obstetrics in residence.

Among the Sisters at the house is Sister Marie Fidelis who was a member of the first staff 50 years ago, and among the superintendents who have directed the institution in its long history and who are still living are Mother Ignatia, Sister Ireneaus, and Sister Pauline.

West Virginia

Open Plasma Bank. The Wheeling Hospital, in Wheeling, has recently established a plasma bank, which promises to be successful both from a professional and from an apostolic standpoint.

Active in Defense Aid. A newly organized Committee on Civilian Defense within the medical staff of Wheeling Hospital, Wheeling, is active in cooperation with the local Defense Committees and in planning for emergency medical service. First-aid courses are being given to general staff nurses and to senior students.

Personnel Changes. Sister Mary Ruth, S.S.J., R.N., formerly instructor in nursing arts, has been appointed administrator of the Wheeling Hospital, Wheeling. Sister M. Geraldine, S.S.J., R.N., will pursue advanced courses in supervision and in surgery. Sister M. Thomasina, S.S.J., R.N., formerly supervisor of the obstetric department, has been appointed instructor in nursing arts in the Wheeling Hospital School of Nursing. The vacancy in supervision has been filled by Sister Mary Ellen, S.S.J., R.N., formerly of St. Joseph's Hospital in Parkersburg.

Wisconsin

Hospital Observes Golden Jubilee. In December, the Sisters of the Sorrowful Mother, the religious organization operating St. Joseph's Hospital in Marshfield, celebrated the golden anniversary of the establishment of this important institution. During the celebration, the Order dedicated the greatly enlarged and remodeled nurses' home. The building of an entrance addition to the hospital itself was also recently completed.

The jubilee observance began with a pontifical high Mass celebrated in the chapel of the hospital by Most Rev. William R. Griffin, auxiliary bishop of La Crosse. A dinner for Bishop Griffin, visiting clergy, city officials, and the staff of the hospital was served in the nurses' residence following the religious services, and the new school of nursing was dedicated at two in the afternoon.

The following day was set aside for public inspection of the hospital and school, while the day after physicians from various sections of the state gathered for an inspection visit, a 7 o'clock dinner, and a program of addresses by members of their profession from Wisconsin and Minnesota.

(Continued on page 32A)

A FENWAL SYSTEM PAYS DIVIDENDS

IN CONVENIENCE... SECURITY... MONEY SAVED... from the day it enables your hospital to prepare, store and administer SAFE PARENTERAL FLUIDS at an amazingly low per-liter cost.

Within a relatively short period, the Fenwal Technic has been adopted by hundreds of conservative yet alert-to-trend hospitals who recognize in this standardized equipment an immediate means of effecting a drastic economy.

PROVIDES FOR ADMINISTRATION FROM ORIGINAL CONTAINERS

- Sterile solutions, under perfect vacuum, can be stored indefinitely without impairing their value as safe parenteral fluids.
- The sterility of solutions can be periodically tested and readily checked immediately prior to infusion without breaking the hermetic seal.
- Fenwal Container-dispensers can be reused hundreds of times. For practical purposes, they are available in graduated 1500, 1000, 500, 400 and 250 cc. sizes.
- Reusable TEL-O-SEAL hermetic closures fit containers of all sizes.

Send for literature describing various capacity Preparation Units and supplementary equipment which insures safety . . . accuracy . . . speed.

We invite your direct inquiry

MACALASTER BICKNELL COMPANY

243 Broadway Cambridge, Massachusetts

Fenwal

THE SOLUTION DESIRED AT THE INSTANT REQUIRED

ANNOUNCING A NEW

Pressed Steel Wheel Stretcher Caster

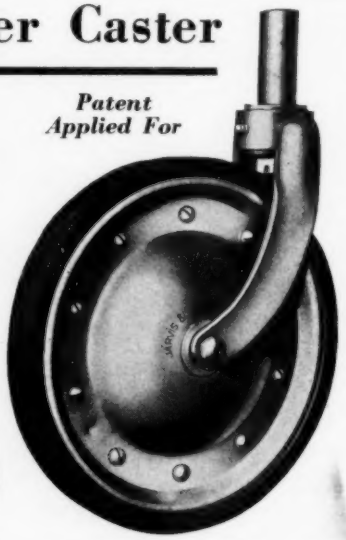
A new caster, in 8 and 10 inch sizes, made entirely of pressed steel, the fork parts being welded into one unbreakable part by Arc Welding. An extremely strong, durable caster.

Caster fork has two self-enclosed ball races of hardened steel, one directly above the other, insuring easy swiveling under load.

Wheel is of the ball-bearing pressed-steel type, with positive clincher grip tires of new live rubber, guaranteed not to creep or loosen in use. *Electrically Conductive Tires can be supplied with this caster, when desired.* Pressure type lubrication is provided for both caster swivel and wheel bearings.

Stems either round or square as desired with threaded end and slotted hex nut, permitting adjustment to compensate for wear on swivel bearings.

Patent Applied For



JARVIS AND JARVIS, INCORPORATED

104 PLEASANT STREET, PALMER, MASSACHUSETTS

HOSPITAL TRUCKS - STRETCHERS - DRESSING CARTS - HAMPERS - ETC.

HOSPITAL ACTIVITIES

(Continued from page 30A)

The Sisters of the Sorrowful Mother give great credit for the success of their first American missions to a zealous young priest who came to Marshfield soon after his ordination in 1886, and served in a number of churches in the vicinity before being permanently appointed to work with the Sisters at St. Joseph's Hospital.

This young priest, now 80 years of age, is Rt. Rev. Msgr. Joseph Joch, and the following condensed history of the early struggles of the institution, written by Msgr. Joch, is an interesting account:

" . . . The first Sisters rented a house (or a room) and nursed the sick in their own homes, if they found any. Besides they even did housecleaning for 25 cents a day, as I was told.

"Then Father Geyer procured for the Sisters the property which is now the park in front of St. John's Church (Columbia Park). It would have been a beautiful site for a hospital, but unfortunately it was later discovered that the deed described only one half of the property, a triangle formed by dividing the whole diagonally, from corner to corner. It was useless for anything.

"After long deliberations, the matter was settled by exchanging the Sisters' claim to this property for the 10 acres of land where the hospital now stands. To save money, no architect was employed, a carpenter in Chippewa Falls making the plans, and a contractor from the same city building the house for $12,000. It was not worth the money.

"The basement, where the Sisters established their home, their convent, was unfinished. There was no plaster, no floor. The heating plant did not heat, and worst of all, there was no water in the house, except what the poor Sisters pumped up by hand into a tank in the attic.

"In those days, when you wanted to start a hospital, all you had to do was put some beds in a room and wait for patients to be brought in. Ambulances were unknown, at least in the smaller places.

"The Sisters equipped a few rooms with beds and waited, but no sick or wounded people came. The only outsider in the hospital was a man by the name of Fitzgerald, who had lost his wife and brought his five children to the Sisters for them to care for. He worked in the Upham sawmill, and his wages, $1.50 a day, was the only income the Sisters had when I came to them. They were kept busy sawing wood and picking berries in the woods.

"To attract patients to the hospital we started selling tickets to the 'lumberjacks' (the woods were full of them) for $5 and $10. When the men got hurt or sick they received everything free in the hospital; otherwise the hospital had the benefit of the five dollars. The holders of the $10 tickets received the same treatment and an extra pay of $5 per week. This was risky business, as sometimes we could not get such patients out of the hospital.

"Again, the men working in the woods had no cash money, and so gave orders on their companies. There were so many of them; they grew like mushrooms and sometimes disappeared overnight. These had to be watched, and I had to be 'Johnny on the spot' to get the money. We had ticket agents for this purpose too, but these had to be watched even more than the companies.

"It happened in January or February, 1893 — the thermometer showed 20 or 30 degrees below zero — that we

(Continued on page 35A)

THE biggest question mark in American history looms ahead of us. 1942 starts out as a year of ominous uncertainties.

With a world at war, and our nation confronted with the supreme task of prosecuting a vigorous campaign for Victory . . . our daily habits of life, our thinking, and our national and individual psychology will necessarily undergo some drastic changes.

There will be some changes for the good. There will be a greater spirit of unity and co-operation among all of our people. Mutual confidence and helpfulness will spread. Things are seldom as bad as they seem at first glance. People will continue to eat and sleep; to listen to the radio, go to the movies, enjoy social diversions.

Supplies and equipment for the care of the sick and injured . . . in peace-time or war-time . . . will continue to be available for all essential needs. And Will Ross will continue to be at your call, at all times . . . to serve you to the very best of our ability, and to the limit of all available resources . . . for the proper care of the sick and injured.

WILL ROSS, *Inc.*

Quality Hospital Supplies

MILWAUKEE
WISCONSIN

Hillyard

FLOOR TREATMENTS AND MODERN MAINTENANCE PRODUCTS

TESTED AND Approved!

HILLYARD SALES CO.

...DISTRIBUTORS HILLYARD CHEMICAL CO. ... ST. JOSEPH, MO. ...

BRANCHES IN PRINCIPAL CITIES

They Resist More Sterilizations *than you probably will ever need to give them... they're Rollprufs!*

What a satisfaction to the *Surgical Supervisor* to know that Rollpruf Surgical Gloves can be sterilized again and again—without material decrease of tensile strength.

And what a satisfaction to the *Surgeon* to know that Rollprufs have *touch sense* to a high degree—above all, that the gown wristlet does not loosen nor flap under the Rollpruf exclusive patented Flat Banded Top.

Furthermore, Rollpruf Gloves do not roll down, skid nor wrinkle over the wrist.

May we tell you how other Hospitals have benefitted using Rollprufs—in either white or brown latex from your usual source of supply?

THE PIONEER RUBBER COMPANY

Manufacturers of Surgical Gloves for More Than Twenty Years

265 TIFFIN ROAD, WILLARD, OHIO, U.S.A. • Cable: PIONEER

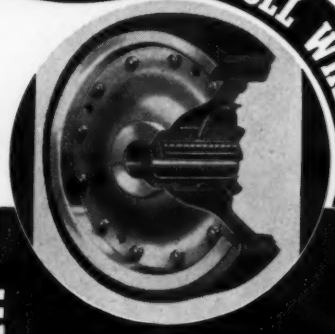
ROLLPRUF SURGICAL GLOVES

Your Surgical Supply House will gladly supply Rollprufs in either White or Brown

A SAVING AT EVERY TURN

DARNELL CASTERS E-Z ROLL WHEELS

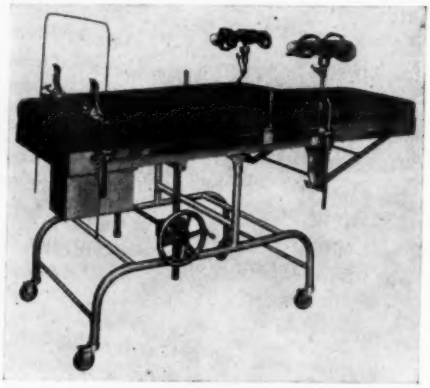
PROTECT THE BEAUTY OF YOUR FLOORS



FREE Manual FOR THE Asking

DARNELL CORP., LTD., LONG BEACH, CALIF.

36 N. CLINTON, CHICAGO • 80 WALKER ST., NEW YORK



NEW FOSCO OBSTETRICAL TABLE

An entirely new table that incorporates features of flexibility, design and construction that you'll appreciate. Very sturdy and compact. Foot section drops and slides underneath main section during actual delivery by turning trigger handles on sides of foot section. Table at full length, or telescoped, can be tilted in any angle of Trendelenberg. Priced right. Fully described on pages 57-58 of our New 50th Anniversary Catalog. Send for your copy TODAY.

MANUFACTURED BY

F. O. SCHOEDINGER

COLUMBUS OHIO

"Why...This doesn't look like a HOSPITAL ROOM"

● **Expressions such as this are the most eloquent compliments a hospital could ask for, and they are heard frequently in rooms furnished and decorated by HILL-ROM. For HILL-ROM craftsmen and decorators know how to create the pleasant, cheerful atmosphere that makes the patient feel "at home," and wins the approval of guests.**

HILL-ROM furnishings, including draperies, carpets and accessories, provide a proper setting for the beautiful wood finishes of the furniture. All HILL-ROM furniture is built to withstand hard usage, and priced for true economy.

Literature showing many complete room ensembles in full color will be sent on request, without obligation.

HILL-ROM FURNITURE
FOR THE MODERN HOSPITAL

HOSPITAL ACTIVITIES

(Continued from page 32A)

had no water. Poor Sisters M. Irmina and Dionysia were working at the pump, because the windmill was out of order. Nobody dared to repair it, so I climbed up, oiled everything, and made it go.

"The next day I had fever and developed pneumonia so badly that Dr. Lathrop had no hope for my recovery. Sister M. Johanna was in distress. To force St. Joseph's help, she climbed through the window and gave the statue of St. Joseph which stands on a niche in front of the old house, a thorough ablution with soap and brush. The same day I asked for my snuffbox and was on the way to recovery.

"As time went on, we received patients, mostly wounded or sick with typhoid fever; imagine our difficulties in treating such cases with our primitive accommodations. With the spring, however, most of our patients disappeared. Our treasury was empty, yet we had to provide money to pay 6 per cent on a mortgage of $6,000. . . .

"Then a Mr. Kreisch came from Oshkosh with $180. Sister M. Johanna was so grateful to St. Joseph that she would have given him another 'scrubbing.'

"That Kneipp Water Cure which she had given to St. Joseph set me athinking. Why not start a Water Cure in Marshfield, and so turn my knowledge acquired in Woerrishofen into money to help the Sisters?

"I advertised our new venture in different papers, and people came in fast; in fact, before the summer was past, so many came from Minnesota, Nebraska, Illinois, and other states that we could not accommodate them all and had to send many of them to the city to find board and lodging.

"We began the Water Cure. But then our well went almost dry, so that we had just enough water for drinking purposes. I made arrangements with the city to send us water with the street sprinkler. This water we emptied into a cistern in the basement and from there we drew it with cans for our treatments. In this way we practiced the Water Cure for about one year.

"Then Mr. Upham (Maj. W. H. Upham, later Governor of Wisconsin), donated us pipes to connect with the city water. The next hydrant, however, was about half a mile away, and we had plenty of trouble, especially from our next neighbor, to secure the right of way to lay the pipes.

"The Kneipp Cure put the Sisters on their feet — financially. With the proceeds I finished the house in Marshfield, making it habitable for the Sisters and patients. Then I paid off the mortgage and looked into the future, for expansion.

"It was the Water Cure that furnished us the means to start almost simultaneously the building of the three new hospitals at Oshkosh, Rhinelander, and Tomahawk. They all received their backing from Marshfield. . . .

"As long as the Water Cure was flourishing, the house was full of Kneippists, but on account of them, the hospital was set back. Dealing with two kinds of patients did not work well, so we had to ignore the hospital cases for a while.

"I had in mind to start a new building for the Cure, but when I went to Danville, N. J., the Kneipp Cure collapsed, and the hospital got the upper hand. . . ."

Elks Sponsor "Free Bed." At the recent dedication ceremonies in connection with the commemoration of the golden anniversary of St. Joseph's Hospital in Marshfield, Postmaster Thomas F. McDonald, state trustee of the Wisconsin Elks Association, made the presentation of an "Elks free

(Concluded on page 36A)

AN IDEAL PLASTER KNIFE
1.
Simply break off end with haemostat or by hand—and slip blade in slot at end of handle.
2.
A twist of the metal collar locks blade rigidly in position. May be released by reversing twist.
Only $1.00
3.
Complete with two blades.

Puts blades (discarded by operating room) back to useful work . . .

TO throw away a blade which has served its turn in the operating room, is to waste much of its potential usefulness. The X-Acto knife provides a handle with which to reclaim these blades to fill many hospital requirements:

Plaster Knife: One of the sharpest, sturdiest, and most effective plaster knives that could be desired; serves efficiently for cutting gauze pads, cotton, etc.

Occupational Therapy Knife: A tool that has become standard for stencil cutting, model building, wood carving, and for all the arts and crafts.

Laboratory Knife: Performs a multitude of useful functions in chemical or dental laboratory.

This handle is specially designed—hollow inside to hold reserve blades, and fluted on the outside to permit a sure grip. All metal parts are substantially and sturdily constructed.

For heavy duty service in any hospital department, the X-Acto knife offers continuous cutting efficiency—*at no upkeep expense.*

Call your surgical dealer . . . or write

CRESCENT SURGICAL SALES CO., INC., NEW YORK

THE X-ACTO KNIFE

From the House of Crescent Surgical Blades

HOSPITAL ACTIVITIES

(Concluded from page 35A)

bed" to be used throughout the year by the most needy and deserving people of the community. The gift is sponsored by the local Elks lodge, and doctors of the city have been advised regarding the nature of cases to be accepted and how the approval of the Elks committee for such use may be secured.

Retreat for Nurses. A retreat for the nurses at St. Francis School of Nursing in La Crosse was held in two divisions January 4–6, inclusive, and January 7–9, inclusive. The retreat master was Rev. Donald F. Miller, C.SS.R., from Oconomowoc.

Glee Club Sponsors Program. A Christmas program, sponsored by the St. Francis School of Nursing Glee Club, assisted by the St. Rose Convent orchestra, was presented in the auditorium of the new nurses' home at St. Francis Hospital, La Crosse. Sister M. Clara played the harp, and Sister M. Agnetis was director. The program opened with the singing and playing of the Star Spangled Banner and Christmas carols. A cantata, *The Wondrous Story,* by R. E. Kuntz was presented by the glee club.

Outside Crib at Hospital. The Sisters of St. Francis Hospital in La Crosse carried out the wishes of Most Rev. William R. Griffin, auxiliary bishop of La Crosse, to have a crib on the hospital grounds as a special feature of the Christmas celebration. A very beautiful crib was placed south of the main entrance. The stable was constructed of birch logs. The figures were designed and painted by the Sisters of St. Rose Convent. Amplifiers were arranged to make it possible to have Christmas carols at the crib.

Baby No. 6000 Is "Free." No Wausau mother is happier over any Christmas present than Mrs. Donald Buhse. She became the mother of Baby No. 6000 at St. Mary's Hospital, Wausau, and it is the baby of this number that the hospital had promised would be a "free" baby, with free delivery-room service, free obstetrical nursing service for mother and baby, free dressings and medication, and free private room, with telephone. Dr. George H. Stevens, the attending physician, completed the picture by donating his services.

But there was more than the receipted bills for all services to make mother Buhse happy. She had hoped earnestly for a baby sister for her two little boys, John and William. The new baby is just what she wanted—a girl. Mrs. Buhse had thought of naming the youngster Sandra Jean, but on the suggestion of nurses and Sisters at the hospital, who shared her great happiness, changed it to Sandra Carol, with the second name symbolizing the time and spirit of Sandra's birth date.

When Mrs. Buhse entered the hospital, she took a room which she shared with five others. When she left the delivery room she was taken to a private room, decorated with flowers and Christmas trimmings and equipped with private telephone. "Is there something wrong? I'm supposed to be in a room with some other women," said Mrs. Buhse in alarm. When she received the heart-warming explanation that as the mother of the hospital's 6000th baby she was to receive the private room and all services free, she became excited with the happy news, saying, "It's very unusual to have something like this happen to me. I'm so happy."

Kansas

Staff Officers Elected. At the annual election of officers for the staff of St. Mary's Hospital in Emporia, the following were chosen: Drs. Paul Trimble, president; C. C. Underwood, vice-president; and C. W. Lawrence, secretary and treasurer.

PRODUCTS OF BAXTER LABORATORIES

VACOLITER SIMPLICITY

. . . provides greater safety in intravenous administration

★ NO COMPLICATED ATTACHMENTS

★ REMOVE THE SEALS AND INSERT THE VACODRIP

Administration of parenteral solutions from the Baxter Vacoliter is simple. The tamperproof metal seal and protective rubber diaphragm are removed and the Vacodrip inserted; that is all there is to it. No *special* precautions against contamination are necessary.

Two depressions in the rubber diaphragm indicate that the vacuum is intact, and the solution, pure and uncontaminated. Purity, sterility and non-pyrogenic qualities are proved by 21 rigid chemical, biological (with laboratory animals) and bacteriological tests and inspections.

Baxter solutions are available in a wide range of dextrose and saline solutions which includes types, percentages and sizes to meet practically every recognized professional requirement.

PRODUCTS OF
BAXTER LABORATORIES
GLENVIEW, ILLINOIS; COLLEGE POINT, NEW YORK; ACTON, ONTARIO; LONDON, ENGLAND
PRODUCED AND DISTRIBUTED IN THE ELEVEN WESTERN STATES BY DON BAXTER, INC., GLENDALE, CALIFORNIA
★DISTRIBUTED EAST OF ROCKIES BY
AMERICAN HOSPITAL SUPPLY CORPORATION
CHICAGO NEW YORK

Style No. 241

For Graduation
and for Graduates...

The Snowhite Style Booklet can be a helpful guide when your seniors select their graduation uniforms.

Although styled to harmonize with prevailing fashions, Snowhite Tailored Uniforms are always designed to be practical and to conform to ethical standards.

A free copy of the Snowhite Style Booklet is available for Hospital Executives, the senior class, and for Graduate nurses on duty in your hospital.

Sample uniforms are also available for the consideration of the senior class.

Snowhite **Garment Mfg. Co.**
2880 N. 30th Street -:- Milwaukee, Wisconsin
MEMBER, HOSPITAL INDUSTRIES ASSOCIATION

TAILORED UNIFORMS
and **HOSPITAL APPAREL**

PERSONAL NEWS ITEMS

Michigan

Change in Hospital Staff. Dr. George C. Stewart of Hancock was named dean of St. Joseph's Hospital in Hancock, at the annual staff meeting held on December 10. He succeeds Dr. Alfred LaBine who automatically becomes a member of the board of trustees. Vice-dean will be Dr. A. B. Aldrich, of Houghton; and the secretary, Dr. Paul S. Sloan, also of Houghton.

Name New Staff Officers. Dr. S. W. Insley succeeds Dr. E. D. Margrave as president of the staff of Mt. Carmel Mercy Hospital in Detroit. The new president-elect is Dr. Charles W. Husband; with Carl Ratigan, secretary and treasurer; and Dr. E. F. Ducey, executive secretary.

Minnesota

Navy Corps Calls First City Nurse. First Minneapolis member of the navy nurses' corps to be called for service at San Diego, Calif., is Mary Ellen McIntosh, a graduate of St. Mary's Hospital in Minneapolis. Miss McIntosh served the Veterans' bureau in Minneapolis, New York, and Chicago, and worked for four years with plastic surgeons in New York before returning to St. Mary's for private duty. She will have naval rating as an ensign.

Doctor Answers Country's Call. Dr. Horatio B. Sweetser, Jr., for the past two years chief of staff at St. Mary's Hospital, Minneapolis, and since 1919 belonging to the Naval Reserve Corps, answered his call recently, reporting for service at the Great Lakes Naval Training Station in Illinois. He now carries the rank of Major at that post. Dr. J. T. Litchfield was elected by the staff at the December annual meeting to succeed Dr. H. B. Sweetser, Jr., as chief of staff.

Changes in Administration. Sister Harriet, who for a number of years has been the administrator of St. Mary's Hospital, Minneapolis, has been appointed to the Provincial

(Concluded on page 40A)

SISTER M. THEOPHANE AND SISTER M. MICHAEL, MEDICAL MISSION SISTERS WHO HAVE COMPLETED THEIR TRAINING AT PROVIDENCE HOSPITAL, WASHINGTON, D. C.

Why Do So Many Nurses Recommend Colgate's Floating Soap?

Here's the Answer!
Some Facts it Will Pay Every Hospital Superintendent to Read!

NURSES say Colgate's Floating Soap is a favorite with many of their patients! "Such rich, creamy lather!" "Makes me feel so clean and refreshed!" These are just a few of the remarks they hear almost every day!

Superintendents like to please patients, too. They know the value of little things. And for them, Colgate's Floating Soap has additional advantages. *First*, there is no finer floating soap on the market! It's pure, white, gentle! *Second*, it's priced to meet the strictest hospital budget! Ask your C.P.P. man for prices. Or, write us direct!

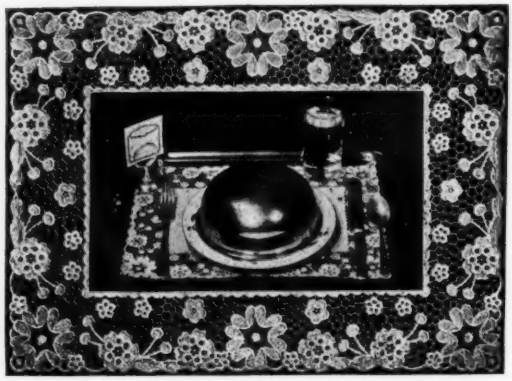
FOR HIGHEST QUALITY MILLED TOILET SOAPS TRY PALMOLIVE AND CASHMERE BOUQUET

PALMOLIVE—the world's favorite toilet soap—is made with rich Olive and Palm Oils...gives an abundance of rich, fragrant, gently cleansing lather.

CASHMERE BOUQUET is considered a real luxury soap. Yet it is economical. Women patients especially love this fragrant, hard-milled, white soap.

COLGATE-PALMOLIVE-PEET CO.
INDUSTRIAL DEPARTMENT, JERSEY CITY, N. J.

"FRAME" DIET TRAYS
in new Beauty



new Milapaco
Lace Papers of Character
REG. U.S. PAT. OFF.

"Cobwebbing" Design
Lace Paper Tray Cover

Add new Eye Appeal . . .
Appetite Appeal!

You can't help but exclaim over the exquisite and delicate beauty of this new Milapaco "Cobwebbing" pattern. Try it on YOUR Diet Trays — and appreciative patients will show you why it's the most popular among the many Milapaco Lace Paper Patterns — already the favorite of Dietitians of the country's leading Hospitals.

Ask your Jobber for Samples of Milapaco Lace Paper Tray Covers — and for Milapaco Souffle Cups and Shallow Jelly Dishes.

No. 30540-51 — 9¾ x 13¾

Milapaco
Lace Papers of Character
MILWAUKEE LACE PAPER COMPANY
1306 East Meinecke Avenue Milwaukee, Wisconsin
Established in 1898

PERSONAL NEWS ITEMS

(Concluded from page 38A)

House. Mother Conchessa, of St. Joseph's Hospital in St. Paul has been transferred to take charge of St. Mary's Hospital in Minneapolis, and Mother St. Ignatius will take over the responsibilities at St. Joseph's.

New York

Noted Cancer Therapist Dies. Dr. James J. Duffy, noted cancer specialist and an alumnus of Holy Cross College in Worcester, Mass., died at the age of 49.

Pennsylvania

Ready for Work. Two Medical Mission Sisters have just heard that they have passed their State Board examinations and will receive their B.S. degree in nursing from Providence Hospital in Washington, D. C. They are Sister M. Theophane Shoemaker of Henshaw, Kentucky, who passed with honors; and Sister M. Michael Waters, of Roanoke, Virginia.

Both Sisters in their senior year at Providence had the privilege of taking as an elective a course in visiting nursing — a valuable preparation for their work in the missions, to which they are looking forward.

New Chaplain Appointed. Rev. Raphael Schatzel, O.S.B., has been appointed chaplain at the new Andrew Kaul Memorial Hospital in St. Marys.

Wisconsin

Serving at Hospital Since 1891. Sister M. Agnes, at St. Joseph's Hospital in Marshfield, is one of the original little group which came to that town in 1891, when the present hospital was first occupied. She has been at the hospital continuously ever since, with the exception of three years, between 1894 and 1897, and a few months in 1901–02 when she journeyed to Rome, and for a period of six weeks in 1918.

Director for Home, Hospital Dies. Sister M. Aloysius, 67, of the Sisterhood of St. Agnes, who was formerly in charge of the Henry Boyle Catholic Home for the Aged and until last July assistant superintendent of a hospital operated by the Order at Monroe, died recently.

Sister Aloysius, who was a nurse, was stationed at the convent, the Henry Boyle Catholic Home for the Aged, and served as superintendent of St. Anthony's Hospital, Hays, Kans., before going to Monroe, from where she returned to Fond du Lac when she became ill.

India

Reach Hospital in India. After nine weeks of travel on land and on sea and on land again, the four Medical Mission Sisters who sailed from San Francisco on September 5 reached Holy Family Hospital in Rawalpindi on All Saints' Day.

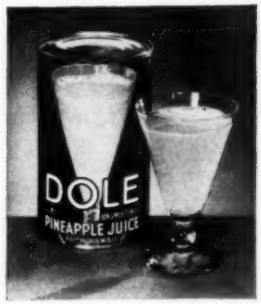
The Sisters reported that one of the most providential occurrences of their trip was that they met an Indian woman from Lahore on board ship who offered to teach them the Urdu language on the way. This lady was returning to India after a stay in the United States where she received her M.A. in Education at the University of Michigan. In Holy Family Hospital, in the far north of India, where the Sisters will be stationed, there is a training school for native nurses, both religious and lay. At present the Sisters are training native Sisters there from three different communities located in various parts of India, which necessitates the Sisters teaching in three native languages besides English. Urdu is one of these languages, and the Sisters were very thankful for their two months' training on the way.

The Sisters are Sister M. Dolores, B.S., R.N.; Sister M. Hedwig, R.N.; Sister M. Damian, R.N.; and Sister M. Nicola. Sister M. Dolores is a graduate of St. John's School of Nursing in St. Louis, Mo.; while the other three Sisters are graduates of Dutch schools in Holland.

For The Average Man

Dole Pineapple Juice is a good source of Thiamin and Ascorbic Acid

Authoritative analyses and assays accepted by the Council on Foods and Nutrition of the American Medical Association show that a 6-oz. serving of Dole Pineapple Juice (approximately 100 calories) contains 240 I. U. of Vitamin C (Ascorbic Acid) and 100 I. U. of Vitamin B_1 (Thiamin).



Notice the chart below. It indicates what Dole Pineapple Juice contributes to the daily allowances for specific nutrients recommended by the Committee on Food and Nutrition of the National Research Council. The left-hand column gives recommended amounts. The right-hand column represents the percentage of the recommendations found in a 6-oz. serving of Dole Pineapple Juice.

Dole Pineapple Juice is also a good source of Vitamins B_1 and C for women and children. It is tempting to healthy appetites and easily assimilated. It is the true, undiluted juice of sun-ripened pineapples and a satisfactory addition to the fruit juice diet.

Percentage contributed to daily recommendations by a 6-oz. serving of Dole Pineapple Juice	THIAMIN B_1		ASCORBIC ACID C	
	Rec. N.R.C. Mgs.	DOLE	Rec. N.R.C. Mgs.	DOLE
Moderately Active	1.8	17%	75.	16%
Very Active	2.3	13%	75.	16%
Sedentary	1.5	20%	75.	16%

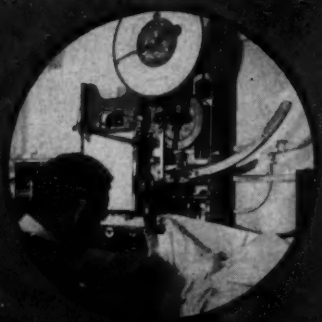
DOLE Hawaiian Pineapple Juice FROM HAWAII U. S. A.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

"Specialists" diagnose

PEQUOT STRENGTH

612 times in 8½ years



THE "GRAB TEST"... one important stage of the tests which check Pequots' plus strength over U. S. Government standards.

The verdict: superior to U. S. Government specifications!

THE GOVERNMENT sets a high standard for heavy muslin sheets—and Pequot tops it. Not once, not occasionally, but consistently, time after time.

This is *proved* by the remarkable series of tests conducted by the U. S. Testing Co. of New York.

Perhaps the most significant thing about these tests is that the Pequots tested are *not* supplied by the company. They are bought by the Laboratories, at random, from retail stores all over America.

These tests are now in their ninth year. Over 600 sheets have been tested... for thread count, breaking strength, weight, sizing content, shrinkage. This well-known laboratory certifies that Pequot Sheets exceed U. S. Government standards by a generous margin.

If you figure closely... and what hospital doesn't?... you cannot afford to disregard this proof of *extra strength* in Pequot Sheets.

PEQUOT MILLS
SALEM, MASS.

PEQUOT SHEETS AND PILLOW CASES

CERTIFIED MERCHANDISE · UNITED STATES TESTING CO. INC. · SEAL OF QUALITY

New Books

The Art of Anaesthesia

By Paluel J. Flagg, M.D. Sixth Edition, Revised. 161 Illustrations. 491 pp. J. B. Lippincott Co., Philadelphia, London, Montreal, 1939.

Anesthesia has made such rapid strides in the past few years that textbooks on this subject must of necessity require frequent revision for the inclusion of new material. That this is true is shown by the fact that six revised editions have been published since 1916. This volume is in the same concise and understandable style as previous editions. A consideration of the classifications, signs, and administration of the various types of anesthesia usually employed is to be found in the opening chapters. The types of anesthesia such as general, local and regional are next discussed fully and the following agents receive detailed treatment: ether, ethyl chloride, chloroform, ethylene, nitrous oxide and nitrous oxide in combination with oxygen and also with ether, novocaine, cyclopropane, vinethene, intracaine, nupercaine and pantocaine, sodium amytal, pernoston, evipal, and overtine.

In addition factors incidental to the administration of these agents receive careful consideration; e.g., preliminary medication, post-anesthesia care, the use of carbon dioxide and rebreathing. Other ancillary problems in anesthesia are discussed fully; namely, aspirators, methods of artificial respiration, and intubation of unconscious patients. The selection of the anesthetic agent and the choice of method for its administration are given generous treatment. The technique of intratrachial anesthesia is dealt with very briefly, and a special chapter is devoted to dental anesthesia and analgesia. A final chapter discusses the cause of death in anesthesia.

The book covers a wide range of topics and impresses one with the enormous extent to which knowledge in this field has expanded within a relatively few years. It is evident that a single work of this kind cannot cover any single phase exhaustively; in the main, however, the information imparted furnishes a satisfactory background for the student of medicine, the interne, or the general practitioner. — *J. M.*

Manual for Medical Records Librarians

By Edna K. Huffman, R.R.L. 308 pp. Price, $3. Physicians' Record Co., Chicago, 1941.

The *Manual for Medical Records Librarians* comprises in four sections of sixteen chapters well illustrated a compendium of information for the student entering the field of medical record library science and, for those who have experience, a valuable reference work. It is a book to have available when particularly puzzling questions are to be answered.

True it is, as the author says, there will be many things the veteran will know, but many articles for self-advancement and armchair education of the overworked librarian will be had in this book. There is also an eight-page bibliography in which may be listed that certain article on medical records some librarian desires to read.

The Sections are: (1) The Medical Records, (2) Procedures in Medical Record Department, (3) Qualifications and Training of the Medical Record Librarian, (4) Secondary Duties of the Medical Record Department. To cite a few examples of the chapter headings will be explanatory: History of Medical Records, Nurses' Notes, Nomenclature, Statistics and Reports, Medical Terminology, Jurisprudence, Correlation of Medical Reference and Medical Record Libraries. The illustrations are similar to those of M. T. MacEachern, M.D., "Medical Records in the Hospital."

— *S. M. C.*

The Inside Story of STANDARD-IZED CAPES

It wasn't intended to be a secret—It's just hard to explain why a Standard-ized Cape retains its regal beauty, graceful style, shapeliness and extra comfort so much longer than other, more costly, capes. But, deep down inside, its sweeping folds of rich, enduring fabrics—reinforced with masterful workmanship—is the key to its long, enchanting life—and to your everlasting satisfaction. Just try one—You'll get surprisingly more pleasure than you expect.

Special attention given
NEW CLASSES in NURSING
Order early to assure timely delivery

Your choice of all color combinations — all lengths and collar styles. Tailored to individual measure.

●

Hospitals: Write NOW for cape on approval. Catalog upon request.

NURSES Standard-ized CAPES

STANDARD APPAREL CO.
Manufacturers of Nurses' Outer Apparel Exclusively
1815 EAST 24th ST. - CLEVELAND, OHIO

Teach Religion to Your Nurses From These Texts

HISTORY OF THE CHURCH

By the Rev. Dr. Joseph Lortz

Translated and adapted from the fourth German edition by the Rev. Edwin C. Kaiser, C.PP.S.

A complete and compact survey of the history of the Church presented according to the "ideas" which have influenced her progress and retarded her development through the centuries. *$3.50*

ELEMENTS OF PSYCHOLOGY FOR NURSES

By the Rev. James F. Barrett

A basic text which gives the nurse a solid foundation in the principles of psychology as based on Catholic philosophy. Emphasizes particular problems of the nurse. *$2.50*

CHRISTIAN LIFE AND WORSHIP

By the Rev. Gerald Ellard, S.J., Ph.D.

The basic principles of worship which will teach your nurses everything they need to know to participate in all the public rites and services of their religion. *$3.00*

Teacher's Manual, *$1.00* (On adoption, no charge)

BACTERIOLOGY, PATHOLOGY, AND APPLIED IMMUNOLOGY FOR NURSES

By Robert A. Kilduffe, M.D.

Embodies all the advances and newer concepts of the various fields. Gives a résumé of various specimens for laboratory use. *$3.00*

For the Nurse With Little Religious Background

CHRIST THE LEADER

By the Rev. William H. Russell, Ph.D.

Acquaints the nurse with the life, works, and teachings of our Lord, and tells how to apply these things to her duties and problems in a vital and practical manner. Makes Christ "really live." *$2.00*

Teacher's Guide, *50 cents*
(On adoption, no charge)

FAITH FOR LIFE

By the Rev. James J. Graham

A "clincher" course in religion which serves as a review, a synthesis, and as an apologetics treatment of the subject, providing a strong religious background for life. A one-semester course presented in Question-Answer-Explanation method. *$1.40*

Key, *$1.00* (On adoption, no charge)

For Non-Catholic Nurses

THINK AND LIVE

By the Rev. Bakewell Morrison *and the* Rev. Stephen J. Rueve

Natural and fundamental religion for the non-Catholic nurse in the Catholic hospital. Makes it possible to give her definite instruction in the essentials of thinking and living. *$1.75*

CHARACTER FORMATION IN COLLEGE

By the Rev. Bakewell Morrison

A course on character formation based on "right reason" or ethics for the non-Catholic nurse. Follows THINK AND LIVE. *$2.00*

MARRIAGE

By the Rev. Bakewell Morrison

The nurse is led *through her own thinking* to a rational understanding of the Church's teaching on marriage and the related subjects. *$2.00*

AVE MARIA HYMNALS

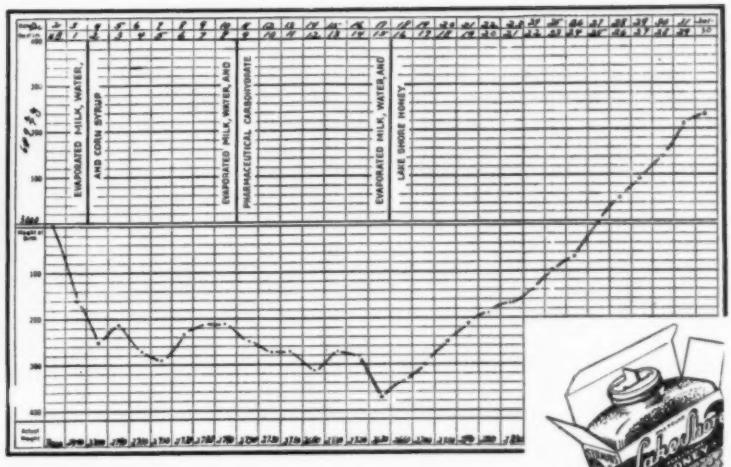
By the Rev. Joseph J. Pierron

English Unison Hymns
Organ Book, *$4.50* Voice, Paper, *80 cents*
Liturgical Section
Organ Book, *$3.50* Voice, Paper, *72 cents*

Send for these books for thirty days' study

THE BRUCE PUBLISHING COMPANY
901 Montgomery Building **Milwaukee, Wis.**

Records show
NO-LAXATIVE ACTION AND FASTER WEIGHT GAINS
For Infants on Enzymized* Honey-Diet


EVAPORATED MILK, WATER, AND CORN SYRUP
EVAPORATED MILK, WATER, AND PHARMACEUTICAL CARBOHYDRATE
EVAPORATED MILK, WATER, AND LAKE SHORE HONEY

Honey-Diet Reverses 15-Day Weight Loss of New-Born Girl

Progress Chart Shows Results of 3 Formulas

First, evaporated milk, water, and corn syrup for 9 days — loss 7%. Second, evaporated milk, pharmaceutical carbohydrate for 6 days — loss 12%. Third, evaporated milk, water, and LAKE SHORE HONEY — weight increase of 17% over birth weight in 15 days.

Now clinical studies* and reports of practicing pediatricians indicate these advantages of Enzymized* Honey-Diet for infant feeding: 1. Honey has no tendency to laxative action. 2. Induces greater weight gains. 3. It is quickly absorbed. 4. Maintains blood sugar longer than sugars containing higher levels of dextrose.

In these tests LAKE SHORE HONEY was used because of its purity, uniformity, and full strength. LAKE SHORE is produced under controlled conditions to assure uniform quality and flavor.

Feeding this honey costs only 3 to 5 cents more per week than cheapest corn syrups. A small supply of LAKE SHORE HONEY for use and observation will be sent upon receipt of the coupon.

*Carefully pasteurized without destroying live enzymes such as valuable diastase, maltase, and invertase.

*"The Use of Honey in Infant Feeding," by F. W. Schultz, M.D., and Elizabeth Knott, Ph.D., Journal of Pediatrics, Vol. 13, No. 4, 463-473, Oct. 1938.

Lake Shore PURE HONEY
ASK FOR THE HONEYCOMB JAR

W. F. Straub & Co.
5530 Northwest Highway, Chicago

Please send at no charge small supply of LAKE SHORE HONEY.

Name .....

Address .....

New Hospital Products

Westinghouse Staff Moves

The administrative departments of the Westinghouse X-ray division have been shifted from Long Island City, N. Y., to the company's radio division plant at Baltimore, Md. This will speed defense work and permit former office space in Long Island to be used as manufacturing shops.

Value of Pineapple Juice

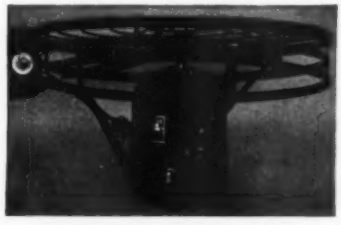
Interesting, indeed, is the pamphlet on *Nutritional Value of Canned Hawaiian Pineapple Juice* issued by Dole Hawaiian Pineapple Co., Honolulu and San Francisco. An analysis of the vitamin, mineral, and other food values of this product is given and also a table of the amounts needed by various persons.

"Hexa-Betalin" for Vitamin B_6

In announcing "Hexa-Betalin" (Vitamin B_6 Hydrochloride) in ampoules and tablets, the manufacturers, Eli Lilly & Co., Indianapolis, Ind., explain that: "The exact position of vitamin B_6 in relation to human nutrition is not clearly defined. The fact has been established, however, that patients who have been treated adequately with thiamin chloride (B_1), riboflavin (B_2), and nicotinic acid, and who still exhibit residual symptoms, often respond to the administration of B_6."

Refrigerators Need Circulation of Air

In many refrigerators moisture collects on the walls and ceiling as well as on the coils where it freezes. A new air circulator known as the Reco Refrigerator Circulator has been devised to eliminate this nuisance. Installed on the ceiling, this fan takes the cold moist air from around the coils and



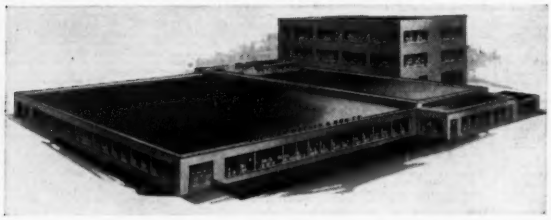
THE RECO REFRIGERATOR CIRCULATOR

forces it against the ceiling, whence it travels down the walls to the floor. This will "dry up" the refrigerator in a few hours and equalize temperature and moisture thus dispelling odors, retarding the growth of bacteria, and preventing wilting and shrinking of fruits and vegetables. For a complete description of the Reco Refrigerator Circulator, address Reynolds Electric Co., 2650 W. Congress St., Chicago, Ill.

Beauty for Floors and Walls

Hospital executives who are planning to install new floor or wall coverings will want a copy of a beautifully illustrated booklet showing the patterns in colors of Armstrong's floorings and wall coverings and a folder *How to Modernize Your Floors*. The booklet also gives complete descriptions and specifications of the various materials with methods of

(Continued on page 46A)



104 YEARS "YOUNG"

Marking a century and four years of service to hospitals throughout the nation, WOCHER, under the direction of the third generation of its founder's family, has recently enlarged its manufacturing facilities to better serve a growing circle of loyal customers.

THE MAX WOCHER & SON CO.

Finest Surgical Furniture Since 1837

29-31 W. 6th St. Cincinnati, Ohio

START THE NEW YEAR RIGHT!

★

WILTEX or WILCO LATEX GLOVES

THE ORIGINAL CURVED FINGER SURGEON'S GLOVES

★

THE WILSON RUBBER COMPANY

THE WORLD'S LARGEST MANUFACTURERS OF RUBBER GLOVES

CANTON, OHIO

NEW HOSPITAL PRODUCTS

(Continued from page 45A)

installation. For these helps write to Armstrong Cork Company, Lancaster, Pa.

Of Interest to Surgeons

Recently, the Clay-Adams Co. of New York City introduced a new ingenious device for the mechanical control of intestinal fistulae. It may be used where there is no obstruction distal to the fistula, in order to allow the opening to become smaller prior to operative closure.

This new apparatus, known as Stone's Fistula Obturator, consists of a soft rubber balloon with a tube to permit inflation. After insertion in the intestine and inflation with about 15 cc. of air by means of a Luer syringe, the bulging balloon blocks gross escape of intestinal contents.

Addition to Blickman Catalog

S. Blickman, Inc., Weehawken, N. J., are issuing their complete catalog of the Conqueror Line of Hospital Equipment in sections, punched for binding in a permanent cover which they supply to buyers. No. 9 ORC is the section on Operating Room Equipment in Stainless Steel. The items are clearly and attractively illustrated and detailed specifications are given for each article so that the buyer can know exactly what is offered.

Diphtheria and Whooping Cough

A preparation of simultaneous immunization against diphtheria and whooping cough has been announced by E. R. Squibb & Sons, New York City. Each 1 cc. of Diphtheria Toxoid Alum Precipitated — Whooping Cough Vaccine Combined Squibb contains a full immunizing dose of Diphtheria Toxoid and 10,000 million killed Bacillus (hemophilus) pertussis.

Promotion for "Bill" Calnan

Announcement has been made of the appointment of William J. (Bill) Calnan, for fifteen years in charge of sales of Monel and other high nickel alloys in the restaurant, hotel, and hospital fields for The International Nickel Company, to the post of assistant to Sales Manager J. F. McNamara.

(Concluded on page 48A)

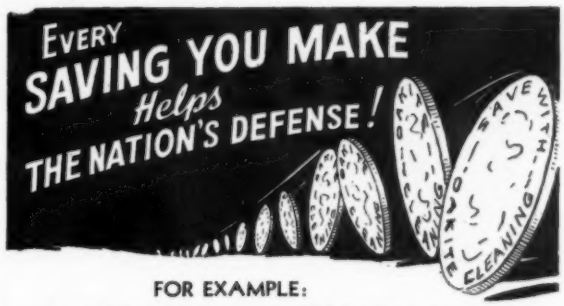
...of Course You Will Need

WOOD FURNITURE

For every-day, practical utility and economy in hospital service...or for de luxe accomodations...Carrom Wood Furniture has no equal. Designed exclusively for hospital use, it has extra strength for long-time service. Its special hospital finish brings out the natural beauty of the wood and protects it against hospital hazards. It is moderate in price.

You will want the new illustrated Carrom furniture catalog. Write for your copy today.

CARROM INDUSTRIES Inc.
Established 1889
LUDINGTON, MICHIGAN



FOR EXAMPLE:

PRESERVING ALUMINUM WARE WITH SAFE OAKITE CLEANING

Since National Defense has "first call" on aluminum, extra care is required to preserve your aluminum kitchen utensils and clinical ware . . . extra attention must be paid to cleaning. That is why, to make them last longer, more and more hospitals are using a SAFE cleaning material like Oakite Aviation Cleaner.

You, too, will find that due to its vigorous, fast yet safe detergent action, this specially designed material thoroughly, speedily removes food deposits, grease films and other accumulations without etching, pitting, or corroding surfaces. Moreover, it is non-toxic . . . completely soluble . . . free-rinsing . . . economical. More complete data FREE on request. Write today . . . no obligation, of course.

OAKITE PRODUCTS, INC., 28H Thames St., New York
Representatives in All Principal Cities of the U.S. and Canada

OAKITE Specialized CLEANING
MATERIALS METHODS SERVICE FOR EVERY CLEANING REQUIREMENT

THREE OR ONE?

ENCOURAGE YOUR STAFF TO USE DEPENDABLE IODINE PREPARATIONS and KEEP EXPENSES DOWN.

IODINE gives you 3 times more for your Germicide Dollar.

IODINE is an efficient and low-cost skin disinfectant.

FREE a fact filled reference for your staff.

Write Dept. J-1 today—now—for your supply.

IODINE

IODINE EDUCATIONAL BUREAU, INC.
120 Broadway New York, N. Y.

HANKEES

are as soft and gentle as a little lamb . . . . .

Hankees are gentle tissues—soft and kind to the skin of your patients. The fact that Hankees are 100% Solka . . . the new, patented Cellulose . . . means they have much more than just *softness*—they have *super-strength* and *super-absorbency*. Hankees are *lintless*, bringing added comfort in hyper-sensitive cases.

And what's probably most important right now — HANKEES are economical.

Try Hankees—they'll meet every hospital requirement.

A DEBS PRODUCT

Debs

HOSPITAL SUPPLIES

205 W. MONROE ST., CHICAGO

Hollister Birth Certificates

. . . provide lasting, profitable publicity of the highest order for Hospitals and Doctors, influence maternity patronage and establish bonds of friendship with the families. Only the genuine Hollister certificates produce such results; imitations are a needless expense. Write for sample certificate and our Booklet—"The Story of the Hollister Birth Certificate, Its Origin and Development."

Mother's thumbprints with baby's footprints, taken on Hollister birth certificates, constitute positive proof of identity and relationship. Good prints are taken with our perfected apparatus.

FRANKLIN C. HOLLISTER Company

538 WEST ROSCOE STREET

CHICAGO

NEW HOSPITAL PRODUCTS

(Concluded from page 46A)

Government Wants Physiotherapy Aides

The U. S. Civil Service Commission is still recruiting physiotherapy aides. Full information may be obtained from the Commission's office at Washington, D. C., or from any first- or second-class post office.

Blackout Window Shades

A practical and efficient method of complying with blackout regulations is to install a set of black cloth window shades such as black Dratex shades now in use in many laboratories and school halls to shut out light during the operation of motion-picture projectors.

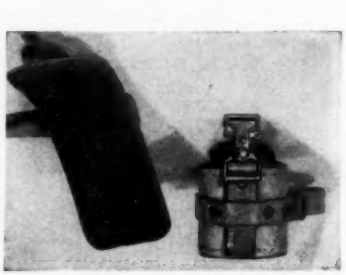
These shades cover the windows completely, overlap each other, and extend beyond the window casings. In addition to their original purpose they have been found an effective saver of fuel if they are drawn when the room is not in use. Now the blackout regulations give them a third important value.

For complete information, illustrations, and prices, write to the Luther O. Draper Shade Co., Spiceland, Ind.

The "Sulfa" Drugs

In 1937 sulfanilamide became available generally and proved to be extremely useful in the treatment of infections due to B. hemolytic streptococci and meningococci. In addition, the drug soon was being employed in urinary tract infections, trachoma, chancroid, lymphogranuloma venereum, and certain cases of gas gangrene, and it demonstrated some benefit in gonorrhea, undulant fever, and actinomycosis. Approximately two years later sulfapyridine was being widely used in the treatment of pneumococcal infections and was found to be more effective than sulfanilamide against gonococci. After only another year sulfathiazole begun to replace sulfapyridine because it was as effective against pneumococci and gonococci, more effective against staphylococci, and occasioned fewer reactions. In urinary tract infections sulfathiazole was superior to sulfanilamide in most cases. Now sulfadiazine is being introduced and it has the advantage of a lower index of toxicity, which makes possible the maintenance of high blood levels.

This group of drugs has become exceedingly widely employed. Soon there will be only a small proportion of the general population which has not received one of them as treatment of some variety of infection (*South. M. J., 34*:1214, 1941). It behooves the physician to choose carefully the most specific and least toxic one for his case. A wide variety of dosage forms have been made available by Eli Lilly and Co.



TOMAC RUBBER-CUSHIONED RESTRAINERS

Rubber-Cushioned Restrainers

A new type of restraining wristlets and anklets have been developed by the American Hospital Supply Corporation (New York and Chicago). The Tomac Rubber-Cushioned Restraint Devices are of solid leather with felt lining, cushioned with ¼-in. pads of sponge rubber.